The Drivers for Divergence: Exploring Variation in New Zealand Organisational Responses to Climate Change

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Abstract

For many years, the development of an Emissions Trading Scheme to mitigate against climate change has been one of the most controversial political issues in New Zealand, particularly since the obligation for emission reduction is placed on some of New Zealand's most productive organisations. This thesis explores the variation in corporate responses to climate change and searches for the underlying drivers which motivate and/or inhibit action. A sample of organisations obligated to reduce emissions under the New Zealand Emissions Trading Scheme was selected, and interviews were conducted with senior managers with designated responsibility for the issue. A narrative analysis of interview transcripts was used as the methodology.

The Bansal and Roth (2000) Model of Corporate Ecological Responsiveness was selected as a framework to consider the motivating logics (including competitiveness, legitimacy, and social responsibility) emerging from the narratives, and insights from other theoretical models applied. In some cases, the findings were explained in ways anticipated by the literature. But in other cases, the results diverged from expected outcomes. Competitiveness was the most commonly attributed motivation influencing corporate responses to climate change, followed by legitimation seeking and, least frequently, social responsibility. However, it was clear that most responses, and actions, were informed by mixed motives, rendering the Bansal and Roth model insufficient for capturing the complexity of organisational motivations underlying their responses to environmental issues.

Factors of influence, particularly issue salience of consumers, played an important role in determining similarities and divergence of response to climate change issues. Where there were synergies between the factors, it encouraged proactive organisational actions. The results showed a range in managerial attitudes and organisational responses to climate change, in relation to risks and opportunities. Some results suggested that organisations respond in similar ways to climate change based on a convergence of institutional pressures, whereas in other cases organisations seemed to be driven to seek a competitive advantage in being as different as legitimately possible, leading to a divergence in responses. This research revealed that political and market uncertainties were seen as a barrier to corporate response. Where synergies existed between economic, institutional and market forces, it was attractive for firms to innovate and differentiate. Overall, the insights gained from this study may provide a greater understanding of the concerns of the business community towards climate change and what conditions will be most conductive to encouraging corporate climate change action.

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Chapter One:
Introduction

1.1 Introduction

While climate change has become increasingly recognised as one of the greatest contemporary threats to the environment, and society, it remains a subject of intense debate. Most notably this controversy is attributed to the difficulty in consolidating social, environmental and economic interests and ascribing responsibility for its causes and consequences. It is, so the rhetoric goes, a global problem requiring global solutions (Bulkeley & Kern, 2006). In 1992, the international community acknowledged and responded to the potential negative impacts of climate change impacts by adopting the United Nations Framework Convention on Climate Change (UNFCCC). This aimed to stabilise greenhouse gas concentrations at a level that would prevent human-induced climate change and implied major reductions in current global emissions. The Kyoto Protocol followed in 1997, which committed developed countries (which ratified the Protocol) to legally binding emission reduction obligations.

In 2002, the New Zealand Government agreed to ratify the Kyoto Protocol, taking on an obligation to respond to climate change and reduce greenhouse gas emissions. In response to this commitment, the New Zealand Government has developed and revised different policy packages over the years in order to meet and manage New Zealand Kyoto obligations in the first commitment period (2008-2012) and beyond. After significant debate and deliberation between the public, the business community, and political parties, an Emissions Trading Scheme (ETS) was passed in 2008. The ETS was planned to be implemented on a nation-wide level, including all emitting industries and sectors (New Zealand Government, 2007). New Zealand was the first country to include agriculture and forestry in an emissions trading scheme. Following a change in national government, the ETS was revised again and confirmed in late 2009.

However, while New Zealand has confirmed its intentions to take action towards climate mitigation, there is significant uncertainty over whether other countries will do the same. While over 180 countries have signed and ratified the Protocol (UNFCCC, 2008), there is no current global agreement for post 2012. In the absence of international agreement, countries are left to make independent decisions on whether they should take responsibility and 'do their bit' to mitigate the greenhouse gas emissions associated with climate change and by how much, or not. This leaves the business sector, who will be primarily responsible for mitigating emissions from the industrial production of greenhouse gases, to deal with the economic impact of environmental regulations on their domestic operations and/or their international competitiveness.

It has been widely acknowledged that many countries have failed to make the reductions to which they are committed, and the implementation of policy mechanisms to encourage reductions, such as emissions trading, has been highly contested (Muhovic-Dorsner, 2005; Backstrand & Lavbrand, 2006). Similarly, the implementation of an emissions trading scheme in New Zealand has encountered significant opposition from a diversity of public and private agents, in anticipation of a multitude of negative social, economic and environmental effects. However, enacting environmental policies always meets resistance: even well designed policies impose duties and costs on private actors, who generally prefer not to be so coerced (Parson, 2006). In public policy making, especially for issues with such far-reaching implications and long term horizons as climate change, the set of options which influence the decision process has implications for the trade-off between early and delayed action, the distribution of costs and benefits, and the prospects for deadlock and conflict (Parson, 2006). The problem with climate change is that primary effects are global and mainly long-term in nature, where current proponents of climate protection measures cannot benefit from them, especially not in the short term. Furthermore, environmental policies are sometimes regarded as a threat to the socioeconomic objectives of local communities. Such concerns even lead to the frequent abolition of plans for strengthening environmental protection (Von Seht, 2002), as has been seen following the protracted debate over New Zealand's policy approach, which led to the abolition of the carbon tax in 2002 and the revision of the ETS in 2008. The government's current climate change policy, and the ETS in particular, represent significant changes in regulatory and societal expectations of the way in which businesses will account for the impact of their carbon emissions on the natural environment (Bui, 2009).

Of particular interest to this thesis is the reaction of the business community to climate change regulation. It is well recognised that climate change poses common strategic dilemmas for companies across a range of industries; however a growing body of literature has found that a significant divergence in industry response remains (Levy & Newell, 2000; Dunn, 2002; Hoffman, 2002, 2005; Kolk & Pinkse, 2004, 2005, 2007; Jones & Levy, 2007; Okereke, 2007; Jeswani et al., 2008; Kolk & Levy, 2008). Of particular interest has been the apparent shift of some corporate actors from an initial oppositional position to a more co-operative and proactive approach, while others continue with a business-as-usual stance. However, efforts to understand the key factors that either drive or inhibit these actions have been limited. Research to date has primarily focused on an international context, relying on websites, reports, or survey questionnaires for investigation but lacking in-depth analysis at a local level (e.g., Kolk & Pinkse, 2004; Hoffman, 2005; Okereke, 2007, Jeswani et al., 2008). In relation to countries typically examined in international studies, New Zealand offers a singular context. As a developed country, New Zealand has a particularly difficult set of issues for emissions reduction, largely as a result of a unique emissions profile dominated by agricultural emissions, extensive forestry, and a high proportion of electricity derived from renewable sources. As a small and isolated country, many of its businesses are also vulnerable to international competition and increasing overseas concern over 'food miles,' making the impacts of climate change policy increasingly sensitive to sector-specific issues. Given the difficulty in designing and reaching consensus on domestic climate policy, an understanding of the drivers and barriers to corporate response to climate change is crucial in developing an approach which would facilitate more meaningful participation and, possibly, more substantial emissions reductions.

1.2 Aim of Research

The purpose of this thesis is to determine if (and to what extent) there is diversity in corporate responses, as well as to explain why this is so, by focusing on three specific research questions:

1 What are the underlying drivers (risks and opportunities) which motivate and/or inhibit corporate action to address climate change?
2 What are the significant managerial perceptions and organisational variables that affect corporate responses to climate change?
3 To what extent are corporate climate responses influenced by conventional business logic (both in terms of profit-seeking and responses to regulatory demands), institutional/organisational processes, and ethical responsibility/responses to public pressure? Which of these lead to greater levels of commitment and action on reducing emissions, and how are these factors inter-related?

The exploration of these research questions was undertaken by selecting a sample of organisations of primary interest to New Zealand climate change policy, based on the obligated actors in the Emissions Trading Scheme regulations. The participants sought for this study were senior managers with designated responsibility for climate change within the sample organisations. The interview data with these managers, as representatives of their organisation, are analysed in an attempt to gain insight into organisational responses to and managerial perceptions of climate change.

Narrative analysis is employed to unravel the dynamics of how organisations respond, survive, and potentially thrive in a carbon constrained world. The expectation is that this study will generate insights into the motivations underlying corporate climate strategies, contributing to a better understanding of why there is divergence in corporate responses to climate change and what is needed to encourage constructive corporate action against climate change.

1.3 Thesis Outline

The overall aim of this research is to critically evaluate, against theoretical and conceptual criteria, how New Zealand organisations have responded to increasing pressures from government, investors and wider society to address climate change.

Following the introduction in Chapter One, Chapter Two will draw on literature from the fields of environmental management, corporate social responsibility, and climate change which characterise how organisations respond to complex environmental issues and attempt to explain variation in corporate behaviours (such as resistance, compliance, avoidance and proactivity). The chapter will then continue with an exploration of the factors which influence why such divergence occurs and the competing theories and models which have been put forward to explain this behaviour. Extensive research has shown that there are a wide variety of contexts and a range of different motivations, drivers and barriers that can influence corporate environmental activity. This chapter serves to examine the theoretical foundations for why there is such variation in organisational responses to environmental issues and climate change in particular. A model upon which to base the analysis is then selected and its use justified. Additional factors of influence identified in the literature are added to enrich the model with the intention of better understanding the motivations behind the responses captured in this study.

In analysing the range of corporate responses to climate change in New Zealand it is important to understand the underlying international context, the state of global negotiation on climate change and its influence on New Zealand's national policy. Chapter Three provides the background of international climate change politics and a brief history of New Zealand environmental policy. The chapter continues with a review of the industry specific details of New Zealand's greenhouse gas profile and their importance in the national economy. This provides an important foundation for understanding the uniqueness and complexity of issues that climate change presents to New Zealand and how this has influenced public and corporate opinion of emission reduction regulation.

Chapter Four describes narrative analysis as both a theory and methodology for research. This chapter begins with an introduction to narrative analysis and its appropriateness for application in organisational research. It introduces a range of theoretical approaches to narrative research and discusses the analytical strategy which will be applied to this study. Used to examine the conditions behind a contested issue and the underlying meanings of the research participants, this approach will be applied to shed light on the motives behind organisational climate change responses.

Chapter Five describes the methodological approach used from the data collection stage to analysis. This includes an account of the recruitment of the organisations and participants, a description of the interview process and the co-production of knowledge between the researcher and the participant. The process for identifying the key themes emerging from the narratives is described as well as how the narratives were subsequently analysed with respect to those themes, drawing on the theoretical concepts introduced in Chapter Two.

The predominant themes which emerged from the interview process are evaluated in the results section, which is Chapter Six. The themes themselves reveal how similarly or differently interviewees perceived the opportunities and barriers of climate change in relation to their own organisation's mission and actions, and the array of values and reasons given to rationalise those positions. The results are presented according to the underlying motivating logic, which are described in Chapter Two. These logics provided a useful framework for differentiating the narrative themes. However, in many instances mixed motives appeared to be operating, and the influence of qualifiers served to show that the underlying model used was simplistic and not able to account for the diversity of responses.

Chapter Seven provides a discussion of the findings in the context of the literature, more specifically where findings corresponded with the literature and where they varied. The application of the theoretical propositions identified and models reviewed in Chapter Two provide a framework to consider each theme in terms of the motivating logic behind it, and then to identify the strongest factors of influence at the various levels of context informing that logic. The similarities and differences between industry sectors, organisational level context, and managerial level conditions are also considered. This discussion ends with a summary of the unique insights that have been provided by this study.

The final chapter provides a conclusion of the study, the findings, and the implications of this research. Recommendations for further research are also suggested.

Chapter Two: Organisational Environmental Responses – Theory

2.1 Introduction

In response to growing consensus among scientists and governments on the urgency to act on climate change, corporate action on climate change appears to be spreading rapidly and growing in intensity (Jones & Levy, 2007). However, academic research on corporate responses to climate change has only recently begun to emerge (Levy & Newell, 2000; Hoffman, 2001; Kolk & Levy, 2001; Dunn, 2002; Kolk & Pinkse, 2004; Hoffman, 2006; Okereke, 2007). Of particular interest has been the apparent shift in the position of some corporate actors from an initial oppositional stance and political lobbying, to a more co-operative and proactive approach. From a critical point of view, however, the underlying motives or drivers for the shift is equally crucial and significant (Okereke 2007). Academic efforts to understand the actual dynamics of corporate emissions reduction programmes and the key factors that either drive or inhibit action have been limited (Kolk & Levy, 2001; Kolk & Pinkse, 2004; Hoffman, 2006; Kolk & Pinkse, 2007; Okereke 2007). This research has shown that there are a wide variety of contexts and a range of different motivations, drivers and barriers that influence corporate environmental activity.

Further, such research is drawn from such diverse fields as economics, accounting, business strategy, organisational behaviour and sociology. Sub-fields have emerged such as environmental accounting and environmental psychology, their investigators each revealing their own biases in terms of the focus they select, theoretical frameworks used, responses measured, methodologies employed and the conclusions drawn in an attempt to explain and predict diverging corporate responses. Most of these studies have been conducted overseas (primarily in the EU), and New Zealand based studies are only now beginning to emerge.

This chapter considers first what past research has revealed concerning how organisations differ in their environmental response. The following section will introduce the models used in environmental management, corporate social responsibility and climate change, as they propose how organisations respond to complex environmental issues. The next section will then explore the theoretical propositions for why this divergence occurs.

2.2 How Organisations Differ in their Environmental Responses

As already noted, there is increasing academic interest in corporate strategic responses to climate change (Kolke & Pinske, 2004, 2007; Hoffman, 2006; Okereke, 2007; Pulver, 2007). These approaches acknowledge a range of existing classifications to characterise corporate strategic responses to environmental problems (Doty & Glick, 1994 cited in Kolk & Mauser, 2002). However, there is a diversity in the terminologies that are used to characterise the different phases and positions, the number of stages that are distinguished and the empirical evidence on which models are based (Kolk & Mauser, 2002). This can make it difficult to compare or apply different models to diverse research problems.

Many are stage, phase or continuum models that describe a development in time consisting of an increasing integration of environmental concerns into business policy and strategy. An example of a continuum is the Reactive-Defensive-Accommodative-Proactive (RDAP) scale (Clarkson, 1995 cited Kolk & Mauser, 2002), adapted from a well-known classification in research on corporate social responsibility. On this continuum, responses range from a reactive stance, which denies responsibility, at the one end, to proactivity at the other, where managers anticipate developments. In between these two extremes are the defensive and accommodative postures which are characterised by reluctant admission and acceptance of responsibility respectively (Kolk & Pinkse, 2004). However, as it is often difficult to distinguish between the last two categories, a three-step continuum (defensive, opportunistic/hesitant, and offensive) has more recently been used to classify the evolution of corporate climate change strategies (Kolk & Mauser, 2002). The defensive posture involves active opposition to climate change treaties and policies, with emphasis on the costs involved and the lack of scientific evidence for climate change. In an opportunistic/hesitant strategy, companies prepare themselves for regulatory and market changes, but take a cautious approach in public. They see no need to be a first mover and to take risks, but, at the same time, preparations are being made to change the corporate position, if necessary. Thirdly, companies that follow an offensive approach point at their own responsibility and the need to take the first step themselves, not only for environmental reasons but also because it will offer market opportunities or improve their image (Kolk & Pinkse, 2004).

While useful as a classification, the defensive-opportunistic-offensive continuum is broad. It assumes that there is only one appropriate class into which each item (company) can be classified. However, these distinctions are mutually exclusive and an entity cannot be placed in two classes simultaneously, and therefore the applicability of such classifications is questionable, as most companies cannot be unambiguously placed in one stage (Kolk & Mauser, 2002). An organisation can move from one strategy to another, or can adhere to one strategy openly (for example, resisting an international treaty — defensive) while simultaneously preparing for change (research into new technologies — opportunistic). According to Kolk and Pinkse (2004), this was the case for most companies (see Levy & Egan, 2003 for an example of US-based companies in the 1990s) that lobbied actively against climate measures. While this continuum was useful in the period when corporate reactions to climate policy were evolving, this system of modelling corporate responses has become outdated.

More recent literature characterises corporate activity using typology style models. Unlike continuum models or classification systems which assume increasing environmental responsiveness over time, typologies merely serve to characterise corporate positions and activities. For example, Levy and Kolk (2002) applied a typology style model to the development of climate change responses by US and European oil multinationals (Levy & Kolk, 2002; see Appendix Section 1, Figure 1). Their approach explores the cooperativeness (through support for mandatory emission controls and climate investments – renewable energy technology), and the assertiveness of companies' public position (identifying their support for or opposition to attempts at regulation). Under these conditions they classify the possible strategies as resistant, avoidant, compliant, or proactive.

While this research develops a strong foundation for distinguishing how corporate strategic responses to climate change can vary, it does less to draw out the underlying motivations, drivers and barriers to corporate action and their contexts. Such attempts to understand the actual dynamics of corporate climate change response and the key factors that either drive or inhibit action have been relatively limited, with research focusing primarily on Multinational Corporations in North America and Europe (exceptions are Kolk & Levy, 2001; Kolk & Pinkse, 2004; Hoffman, 2006). The next section will look at the theoretical propositions put forward to explain 'why' there is divergence in organisational responses to climate change and the underlying drivers and barriers which motivate and/or inhibit corporate response.

2.3 Why Organisations Differ in their Responses to Climate Change

Research to date has shown that there are a wide variety of contexts and a range of different motivations, drivers and barriers that influence corporate environmental activity (Bansal and Roth, 2000; Okereke, 2007; Jeswani, 2008; Lynes & Andrachuk, 2008;). It has been suggested that these factors of influence towards environmental action are individual to each business and therefore it may not be possible to identify a typology of factors that drive environmental action across industries (Baylis, Connell, & Flynn, 1998). Other investigators have, however, put forward theoretical propositions which allow generalisations to be made of the motivations, drivers and barriers as well as the contextual level variables that influence organisational activity.

2.4 Motivations for Organisational Environmental Responses

As previously noted, research on motivations for organisational environmental responses often reflects the diverse disciplinary biases of the investigators. The motivations proposed in business and economic research, for example, are based on the assumption that corporate decision makers are driven by economic rationality and profit maximisation, arguing that active corporate commitment to environmental and social goals can increase shareholder value, and lead to competitive advantage (e.g. Oliver, 1997; Russo & Fouts, 1997). Other scholars have, however, found the profit motive inadequate to explain organisational environmental behaviour and looked more deeply at alternative motivations behind environmental and sustainability management (e.g. Bansal & Roth, 2000; Prakash, 2001; Hahn, 2006). They argue that it is crucial to understand the reasons why corporate decision makers adopt environmental and sustainability management practices when they do not apparently result in profit increases. Their findings suggest that there are other motivations for environmental and sustainability management besides profitability. Namely, corporate environmental and sustainability management may also be driven by ethical and normative motives or may be explained by institutional pressures and coercive adaptation (Prakash, 1999, 2001; Bansal & Roth, 2000).

In exploring the motivations and contextual factors that induce organisations to take responsibility for environmental issues, Bansal and Roth (2000) developed a model of ecological responsiveness to distinguish three main categories of motivational logic driving corporate action, comprising competitiveness, legitimacy and social responsibility. They conducted a qualitative study of the motivations and contextual factors that induce corporate ecological responsiveness, interviewing managers from a range of organisations including food retailers, subsidiaries of the diversified Britain-based multinational P&O, auto manufacturers, oil companies, and Japan-based companies. The exemplary quotes gathered from the interviews were associated with and provided illustration of the appropriate motivating logic; see Figure 2 of Appendix Section 1.

Cited in over 400 books and academic journals, this model has been influential in the organisational environmental motivation and action literature, particularly as it is applied to different industry contexts. References to their study range across a variety of social, economic and environmental sub-fields including business ethics, strategy, decision management and organisational studies. Their model has been tested empirically in a number of industry sectors and countries, and may therefore be applicable to this thesis which aims to identify the underlying motivations of managers and their organsations across five different industry sectors in New Zealand.

In recognition of the relevance of the Bansal and Roth model to this research, the following sections will review in greater depth the motivations for corporate ecological responsiveness categorised in this model, including competitiveness, legitimacy, and social responsibility. I will first discuss the details of each motivation, and then proceed to consider the contextual influences which lead to corporate responses (or initiatives, as described by Bansal and Roth).

2.4.1 Competitiveness

According to Bansal and Roth (2000) "competitiveness" can be defined as the potential for ecological responsiveness to improve long-term profitability. These include ecological responses that improve competitiveness such as energy and waste management, source reductions resulting in a higher output for the same inputs (process intensification), ecolabeling and green marketing, and the development of "ecoproducts." Some proponents of corporate social responsibility argue that environmental sustainability should not be seen as an additional cost for companies, but as an opportunity to improve competitiveness in a win–win logic (Porter & van der Linde, 1995). The literature highlights several benefits that can arise from integrating environmental sustainability issues into business operations: increased efficiency in the use of resources, return on investment, increased sales, development of new markets, improved corporate image, product differentiation and enhanced competitive advantage (e.g. Shrivastava, 1995;Kolk, 2000; Chen *et al.*, 2006). Chen *et al*. (2006) investigate the role of green innovation in corporate competitive advantage, based on a survey on Taiwanese companies operating in the information and electronics industries. The authors found that the performance of both green product and green process innovations is positively correlated to competitive advantage. Organisations which pursue these win-win opportunities demonstrate the motivation of competitiveness logic.

2.4.2 Legitimation

Legitimation seeking refers to the desire of a firm to improve the appropriateness of its actions within an established set of regulations, norms, values, or beliefs (for example, Suchman, 1995; Prakash, 1999; Bansal & Clelland, 2004). According to Bansal and Roth, legitimation is strategically directed toward complying with institutional norms and regulations, where organisations focus not on proactive efforts but on reactions to external constraints made to avoid sanctions (Wood, 1991; Hart, 1997). Examples of legitimation include complying with legislation, establishing an environmental committee or environmental manager position to oversee a firm's ecological impacts and advise senior management, developing networks or committees with local community representation, conducting environmental audits, establishing an emergency response system, and aligning the firm with environmental advocates (Bansal & Roth, 2000).

Institutional approaches assume that companies pursue environmental and sustainability management in order to gain legitimacy in their organisational field, and to be perceived as appropriate, legitimate and desirable within some socially constructed system of norms, values, beliefs and definitions (see, e.g., Prakash, 1999, 2001; Bansal & Clelland, 2004). Institutional theorists argue that organisations are not autonomous units, able to develop behaviours in isolation from the influence of the external environment (Hoffman & Ventresca, 1999). In fact, it is argued that institutional arrangements and social processes are central to the formulation of both individual and organisational action (Orru, Biggart, & Hamilton, 1991). Organisations and managers within them cannot choose from an unlimited range of possible strategies but are limited to choices that are bound by institutions. Organisational activities are therefore not simply at the discretion of managers, but deemed to be selected from amongst "a narrowly defined set of legitimate options determined by the group of actors composing the firm's organisational field" (Hoffman, 1999; 351). Sometimes new organisational activities are adopted as individual organisations within the field innovate to seize opportunities or to avoid threats (DiMaggio & Powell, 1983). These activities can become institutionalised (or part of the set of legitimate options) themselves if other organisational structures and activities become enacted as a result (Zucker, 1987), and/or the innovations are perceived as successful and copied by others (DiMaggio & Powell, 1983; Haunschild & Miner, 1997 cited in Bebbington, 2009). The institutional influence on the organisation can be subtle and is largely that of "fitting in" and operating "appropriately" (Orru *et al*., 1991; Scott, 1995). Moreover, social pressure is such that conformity can occur even in practices which are obviously inefficient or of little demonstrable technical utility (Zucker, 1987 cited in Bebbington, 2009). From this perspective institutional theory predicts a convergence or isomorphism in organisational activities.

Institutional theories pose questions about how these choices are shaped, mediated, and channeled by the institutional environment (Hoffman & Ventresca, 1999). Institutions and organisations can be central in the basic framing of policy issues such as the environment and economics relationship. Institutions present contexts that alter individual and organisational perspectives on relevant issues. They also contribute the cultural terms and cognitive elements around which the policy issue is debated. In this way, policy debates, including problem definition and the form of its solutions, are influenced not only by strategic, technological, or economic considerations but also by their social, cultural, and institutional contexts (Bazerman & Hoffman, 1999 cited in Hoffman and Ventresca, 2002).

Organisational strategy is generally considered to be based on economic rationale which matches corporate capabilities to market demands, but some have noted that this does not always explain the heterogeneity observed in corporate strategies toward complex issues such as climate change (Levy & Rothenberg, 2002). New institutionalist models of firm behaviour reject economic or rational actor models of organisations. It is argued instead that organisational interests and drivers of corporate action are the result of shared knowledge creation within the firm and other actors in its organisational field (e.g. Hoffman & Ventresca, 2002). A firm's organisational field represents "those organisations that in aggregate constitute a recognised area of institutional life: key suppliers, resources and product customers, regulatory agencies and other organisations that produce similar services or products" (DiMaggio & Powell, 1999: 64-65 cited in Gonzalez-Benito & Gonzalez-Benito, 2005).

When explaining variation in organisational environmental activity, new institutionalists highlight the role of the firms' own assessments of the benefits of ecological responsiveness as perceptions of issue salience (Bansal & Roth, 2000), the values of individual managers (Hoffman, 2001), and the intensity and density of formal and informal network ties between managers and other actors in their organisational fields (Engels, 2006). In this way, organisations with seemingly similar operations, facing the same external pressures (market, regulatory and stakeholder) may adopt different environmental responses because of divergent understandings prevalent in the particular economic, political, and socio-ideological networks in which individual firm managers are embedded (Pulver, 2007). The motivations behind organisations' adoption of environmental strategies can therefore be very different and revealed only by the context of the study and the research approach (Elkington, 1994, 1997; Shrivastava and Hart, 1995; Bowden *et al*., 2001; González-Benito & González-Benito, 2006; cited in Albino *et al*., 2009). For example, in a global study of automobile companies' responses to climate change, Levy and Rothenberg (2002) argue that strategic choices are based on assumptions and forecasts that arise from an organisation's interactions with its institutional environment. Of particular importance to the climate issue are perceptions about climate science, anticipated regulatory responses, and the technological and market prospects for various low-emission options. Levy and Rothenberg argue that corporate perceptions to climate change are formed from the influences of national environments, issue specific context, and each company's corporate history and characteristics. Levy and Rothenberg (2002) claim that this leads to heterogeneous or divergent perspectives from the managers' experiences in other social and cultural contexts. For example, there remains a competing discourse on the divergent perspectives concerning the costs and value of environmental management. Levy and Rothenberg assert that many companies still adhere to the traditional notion that environmental regulations are inherently costly, but many others are embracing the discourse and practices of environmental management, termed "eco-modernism" by Hajer (1995), which claims that incorporating environmental concerns into business strategy can generate "win-win" outcomes (Levy & Rothenberg, 2002). However, there has been significant debate over whether the relationship between economic competitiveness and environmental protection can produce win-lose or win-win outcomes. Win-lose proponents argue that economic growth and environmental protection are largely incompatible, as environmental protection must, by its very nature, reduce economic competitiveness (Walley & Whitehead, 1994; Palmer, Oates, & Portney, 1995 cited in Hoffman *et al*., 1999). In contrast, win-win proponents argue that a mentality whereby one side can win only at the expense of the other is a false dichotomy and suggest that economic competitiveness can be improved through environmental protection (Gore, 1992; Porter & van der Linde,1995a, 1995b cited in Hoffman *et al*., 1999). These competing perspectives between economic and environmental practices and objectives are evident in the climate change debate in New Zealand.

Institutional theory suggests there is a limited norm of what is considered legitimate by the institutional environment, leading to competitive isomorphism, in that organisations adopt the same prescribed actions to get performance benefits, resulting in homogeneity within industries (DiMaggio & Powell, 1983; Barney, 1991; Lieberman & Asaba, 2006). However, there is debate in the organisational theory literature as to whether achieving legitimacy through competitive isomorphism leads to an organisation being efficient, effective or profitable (Bui, 2009). While institutional theory-based isomorphism predicts that organisations gain superior performance by conforming to an industry recipe (McNarama, Deephouse & Luce, 2003) other research suggests that legitimacy-based imitation contributes negatively to organisation profitability (Lieberman & Asaba, 2006). A middle-ground position is that organisations will make strategic choices that conform to an industry norm so as to gain access to the resources needed to survive, but will differentiate with other strategic choices that are within what is considered legitimate so as to create a competitive advantage that generates superior performance or higher profits than competitors. This will allow an organisation to achieve a strategic balance between technical efficiency and effectiveness while being perceived as legitimate through differentiation and conformance to accepted social norms (Oliver, 1991; Deephouse, 1999; Scott 2001; McNarama *et al.* 2003; Ravasi & van Rekom, 2003; Barreto & Baden-Fuller, 2006; Fernandez-Alles & Valle-Cabrera, 2006; Kostava *et al.* 2008 cited in Bui, 2009). From this perspective organisations "seeking a competitive advantage should be as different as legitimately possible" (Deephouse, 1999, p.148). Therefore, strategic responses will be selected that result in "conformity to institutional pressures which leads to isomorphism and legitimacy and also in differentiation, by selecting where it is possible to create a competitive advantage though heterogeneity in resources and capabilities" (Fernandez-Alles & Valle-Cabrera, 2006; 505). This literature has shown that institutional approaches to organisational research can be used to explain both isomorphic corporate responses as well as divergent corporate actions based on contextual and motivational factors. The context of such research and the factors it explores are therefore highly relevant to the questions presented in this thesis. From this perspective it can be postulated that climate change will present a range of institutional pressures which motivates organisational responses in order to maintain legitimacy.

2.4.3 Social Responsibility

Beyond legitimacy and competitiveness, a third important motivation behind environmental proactivity is social responsibility, deriving from the concerns that companies have for social obligations and values (Welford, 1997; Dyllick and Hockerts, 2002). Proponents of normative behavioural motives behind corporate environmental or sustainability management propose that corporate decision makers act out of an ethical responsibility towards a company's social and natural environment (e.g. Takala & Pallab, 2000; Wulfson, 2001). Companies that embrace the concept of sustainability in their strategies are usually referred to as sustainability driven companies. In this context, sustainable products can assume a strategic role, being sustainable offerings in environmental, social and economic terms (Maxwell *et al*., 2006; cited in Albino *et al*., 2009).

According to Bansal and Roth (2000), ecological responsibility is interpreted as a motivation that stems from the concern that a firm has for its social obligations and values. In their study, initiatives motivated by ecological responsibility included the redevelopment of previously used land to green areas, the provision of a less profitable green product line, donations to environmental interest groups and other local community groups, the use of recycled paper, the replacement of retail items or office products with ones more ecologically benign, and the recycling of office wastes. In the context of climate change, these initiatives would relate to funding R&D, investments in low-emission related technology (such as renewable energy) and fundamental changes in processes, products and services (such as changes in feed stock, manufacturing, and fuel usage) (Okereke, 2007). A salient feature of this motivation is a concern for the social good. An organisation's sense of social, moral or ethical responsibility to deal with controversial or sensitive social or environmental issues is, therefore, seen as another underlying motive of corporate environmental responses.

In summary, these three motivational logics have been well cited in relevant literature in the fields of environmental management, corporate responsibility and climate change, and more recent research has elaborated on the underlying contextual variables which influence action. The following section will discuss the other factors which serve to enhance this model and the theoretical framework for exploring corporate responses to climate change.

2.5 Other Models on Organisational Motives, Drivers and Barriers

This section will review three more recent models that hold some relevance for this thesis. One study explores corporate social and environmental responsibility (CSER) in the Scandinavian airline industry (Lynes & Andrachuk, 2008). The second study (Mair & Jago, 2010) explores the motivations, barriers and the process of corporate 'greening' in the Australian events tourism sector, and the third study considers corporate responses to climate change amongst the UK FTSE100 (Okereke, 2007).

In an exploration of corporate social and environmental responsibility (CSER), Lynes and Andrachuk (2008) propose a list of drivers (which they term "motivations") not included in the Bansal and Roth model. The motivations here are financial benefits, competitive advantage, image enhancement, stakeholder pressures and the desire to delay or avoid regulatory action.

In the second study considered here, Mair and Jago (2010) develop an adapted model based on a review of existing models in the literature which examines the motivations, barriers and the process of corporate ‘greening’ in an Australian study of the business events tourism sector. Exploring a range of studies based on different industry sectors to inform their model, they argue that a conceptual framework of the general greening process should start with all the potentially relevant drivers, even though some may not be relevant for certain sectors. In this study they refer to greening as the investment in environmentally friendly facilities and practices. Some of the environmental practices considered to be “greening” are changes to products, processes and policies such as reducing energy consumption and waste consumption, using ecologically sustainable resources and implementing an environmental management system (Bansal & Roth, 2000) – similar activities to those associated with climate change response. They develop a comprehensive model for the process of corporate greening, including the contexts, drivers, barriers, catalysts and initiatives.

A third, more recent study by Okereke (2007), of corporate responses to climate change amongst the UK FTSE100, is also of particular interest to this thesis. In this paper, Okereke identifies the motivations, drivers and barriers in order to provide insight into the internal dynamics of corporate climate strategy. She suggests that the underpinning logic of business actors could be divided between factors that relate to the inherent tendency of business to maximise profit and those that are closely connected to the wider societal environmental concerns and pressure on business. Okereke (2007) differentiates between factors that motivate and those that drive business climate activities, as previous research has used these terms interchangeably in reference to anything that prompts businesses into taking climate action (Dunn, 2002, Kolk & Pinkse, 2004; Hoffman, 2006). In her analysis, the term motivation is used to refer to the factors that can be said to arise more or less directly from the raison d’etre of business to maximise profit. It is suggested that motivational factors on their own are capable of inciting corporations to undertake carbon management actions, even in the absence of any form of direct external (regulatory and public) pressure. Here she includes ethical considerations making the argument that some companies are genuinely motivated to take climate actions for the purpose of the environment even without external pressure. However, Okereke warns that such ethically motivated actions are well known to be pursued only insofar as they do not harm profit. From this understanding she offers the following list of motives: profit, competition for credibility and subsequently for leverage in climate policy development circles, fiduciary obligations, desire to guide against possible risk or business loss that might result from inaction on climate change, and ethical considerations.

Okereke uses the term driver for the factors that have the potential to “force” corporations to take climate response action even when they would not have ordinarily wanted to do so. External pressures such as governmental regulations and both public and NGO pressure are considered here. Okereke considers the main drivers to be concern for energy prices (i.e. vulnerability to fluctuating energy prices), recognising a market shift (i.e. consumer preferences), government regulation, investor awareness and pressure (especially for CDP respondents), and technological innovation for emissions reduction.

Neither Lynes and Andrachuck (2008) nor Bansal and Roth (2000) refer to the barriers to environmental action, preferring to concentrate on the drivers instead. However, a number of authors have suggested that it is very important to consider the barriers as well as the drivers (e.g. Okereke 2007). Mair and Jago (2010) mention other barriers to corporate action, including lack of time, resources, knowledge/awareness/skills, and operational timeframe (Mair & Jago, 2010). While Mair and Jago provide a useful model which includes all the potential drivers and barriers to corporate greening, Okereke's (2007) work on the motivations, drivers and barriers to carbon management may also add value here.

Okereke refers to barriers as factors that inhibit companies from adopting proactive environmental activities. (Perceived) high costs (or negative cost-to-benefit ratios), knowledge gaps, absence of adequate environmentally friendly alternatives and a lack of co-operation by stakeholders (shareholders, suppliers, customers, governments etc.) are often-mentioned barriers (Runhaar *et al*., 2008). The types of barrier reported in the literature are more diverse than in the case of incentives, and relate to economic aspects (e.g. marketing risks or availability of 'green' resources), governmental regulations, knowledge and social aspects (lack of co-operation or even opposition on the part of stakeholders) (Runhaar *et al*., 2008). Okereke (2007) also includes a lack of clear, long-term and robust policy framework, uncertainty about government's action in the issue of climate change, and uncertainty about the marketplace (See Figure 3 of Appendix Section 1).

Okereke uses these motives, drivers and barriers to examine why companies may choose to undertake carbon management programs as well as the obstacles they may face. Her analysis reveals that companies are prompted to take climate actions for a wide variety of reasons. These range from self-interest and profit oriented reasons through to governmental and public pressure to ethical considerations. However, Okereke does note that reasons may not be mutually exclusive, but rather interact in different mixes to influence an organisation's strategic choices. Okereke also argues that several contextual factors influence the actual reasoning and particular factor-mix that underpin companies' carbon management programmes. Here she includes location, sector, area of operation, historical experience, area of focus and the unique challenges being faced by the companies.

As a range of literature has shown, there are a variety of factors which exert pressure on or motivate organisations to respond to environmental issues, or inhibit action. Many studies have found that industry response varies significantly between sectors, between industries within the same sector and between countries. There are also other contextual influences, such as those suggested by Okereke, that contribute to the divergence in environmental responses. The next section focuses on these other contextual factors of influence identified from past research.

2.6 Other Contextual Influences

The Bansal and Roth model examines not only the factors influencing environmental action, but also the context in which these factors exert influence on an organisation. These include the ecological context, organisational field, and individual level contexts. The final element of their model also predicts which types of initiatives are likely to be a response to these drivers. Since then, many scholars in fields ranging from corporate social responsibility, environmental management, and climate change have provided further elements which enhance Bansal and Roth’s work in specific contexts and towards specific issues (e.g. Sharma, 2000; Lynes & Andrachuk, 2008; Mair & Jago, 2010). The following sections will briefly outline the external, organisational and managerial level factors which can also influence the three primary motivations identified by Bansal and Roth behind organisational climate change responses.

2.6.1 Macro/External Level

Macro forces are the broadest context of influence that are external to the organisation. In strategic management theory, these forces are referred to as PEST forces: Political, Economic, Social and Technological (Grant, 2004). The relevant tenet is that the PEST forces in each country influence the extent to which firms within industries approach environmental governance (Kolk, 2005 cited in Mair & Jago, 2010). The external influences suggested by Lynes and Andrachuk (2008) include available technology, political leadership, the state of the economy and consumer trends, none of which were explicitly included by Bansal and Roth (2000).

In this thesis, the external context may include: political forces (i.e. the state of national and international climate change policy), economic factors (e.g. the economic recession), social forces (i.e. consumer trends), and technological factors (e.g. available mitigation technology). These are likely to impact the relative uptake of climate related initiatives and may therefore be relevant to this study.

2.6.2 Organisational Level

The organisational level context has also been mentioned in the literature as a significant and influential variable in corporate social and environmental response. Of particular interest to this study, these include organisational size and emissions level, industry sector, firm ownership, position in the value chain, exposure to competition, stakeholder pressure, and strategic attitude.

Company size and ownership structure are two structural variables that seem likely to influence the implementation of environmental practices, primarily because large companies and multinational corporations (MNCs) have more resource availability and capital available for investment and receive more pressure from stakeholders and the institutional environment to be environmentally proactive (Gonzalez-Benito & Gonzalez-Benito, 2006). These organisations are the target of green consumers, non-governmental organisations, environmental regulators and the media since they are often viewed as leaders which set an example for their industry, and their actions have significant social and environmental reprecussions. The workforce in large organisations also tends to be more organised and demanding, thus exerting more pressure on different issues, particularly in concern for the environment. In addition, these companies are usually quoted on the stock exchange and their value is therefore more directly dependent on the interest and recognition they arouse in the wide range of investors, including those applying ecological criteria when making up their portfolios (Gonzalez-Benito & Gonzalez-Benito, 2006). Larger organisations are also likely to have higher levels of emissions, which burdens them with high emissions costs and liabilities under the ETS (Bui, 2009).

In a similar vein, Scott (2001) suggests that large public sectors firms, like state-owned enterprises (SOEs), are more exposed to public scrutiny, more sensitive to institutional changes, and thus more responsive to changes in regulatory and legal requirements. Privately-owned firms, in contrast, are more concerned with stakeholder value and economic profitability and have less intensive government and public exposure. While privately-owned firms need to be accountable to their shareholders, the need to accommodate the public's concerns is not as high as for the state-owned firms (Bui, 2009). From this perspective, it may be seen that MNCs and SOEs are more responsive to climate change.

The proximity to the final consumer within the supply chain can also be an important factor influencing the environmental responsiveness of a company. This is due to the fact that consumer pressure is high for the manufacturers of finished products and loses strength the higher the manufacturer's position in the supply chain (Gonzalez-Benito & Gonzalez-Benito, 2006).

The industrial sector is by its nature also a fundamental component of influence to organisational activities and responses, due to their operational emissions and their capacity for reduction. Each industry has a different polluting potential and is subject to different controls and scrutiny from institutions, social groups and consumers (Gonzalez-Benito & Gonzalez-Benito, 2006). Industries such as chemicals, utilities and natural resources and transportation industries are among those that are perceived by the public as environmental-damaging (Holmes, 1976), and are also likely to be subjected to more extensive and stricter environmental rules and regulation (Clemens, 1997 cited in Gonzalez-Benito & Gonzalez-Benito, 2006). Due to the nature of their business operations, these industries are more likely to experience environmental crises/incidents, and therefore may face stronger pressures from stakeholder groups, such as the local community and Greenpeace, to reduce the impacts of such incidents and prevent their re-occurrences in the future (Greening & Gray, 1994). This is a form of institutional pressure, exerted on these industries to take environmental issues more seriously (Abouzeid & Weaver, 1978; Shetty, 1979 cited in Bui, 2009) and to take action to correct or mitigate such negative perceptions (Bui, 2009). In fact, research in the United States has shown that these sectors devote the highest volume of their resources to pollution abatement in order to deflect this damaging image (US Department of Commerce, 1996), and according to Arora and Cason (1996), the intensity of polluting emissions has a positive influence on voluntary participation in pollution prevention programmes (cited in Gonzalez-Benito & Gonzalez-Benito, 2006).

In addition, some scholars argue that exposure to competition, whether domestic or international, may influence an organisation's response to environmental legislation. For example, organisations may suffer loss of competitiveness when they have to compete with other industries outside New Zealand (and EU) without the imposition of climate change legislation. As a result of the ETS, New Zealand organisations will face emissions-related costs either from their direct emissions' liabilities or through electricity and liquid fossil fuel price increases, which will increase total production costs and make them less price competitive than their rivals who originate from non-ETS countries. This will not only infringe on their profitability, but may even threaten their survival in the medium to long term (Bui, 2009).

Moreover, some industries are also constrained in their ability to reduce emissions due to the lack of mitigation technologies; also, not all industries are equal in their mitigation opportunities. For some industries such as electricity and transportation, these technologies, such as renewable energy generation and bio fuels, are already available. However for other industries, low-impact technologies may take decades to develop and become commercially available (IPCC, 2007). The agricultural sector, for example, has no current technology available to mitigate the methane emissions associated with ruminant animals such as cattle, without the necessary reduction in total production. As a result, there is a significant disparity in the capacity for organisations to mitigate their emissions, based on the technologies available for their sector.

Another variable which has been identified as relevant for environmental behaviour is corporate strategic attitude, known as the way in which a company reacts or proacts to market stimuli (Azzone *et al*., 1997). Aragón-Correa (1998) claim that strategic proactivity, understood as the company's tendency to initiate changes in its strategic policies before they are demanded, is positively related to a greater environmental proactivity, as they are used to modifying their products, to developing new markets, and have organisational structures that facilitate innovation and flexibility (Aragón-Correa, 1998 cited in Gonzalez-Benito & Gonzalez-Benito, 2006). From this perspective, the strategic attitude of the organisation will influence the extent of corporate reaction to climate change.

2.6.3 Managerial Perceptions

Another factor influencing the variability of organisational climate change responses is the influence of managerial perceptions of climate change. Managerial interpretations refer to the process by which managers make sense of events and other information in their environment (Dutton *et al.*, 1983). These processes will determine which events or information will be attended to by managers and those which will be ignored (Daft & Weick, 1984), and will subsequently influence organisational actions and strategies (Dutton *et al*., 1983; Daft & Weick, 1984; Dutton & Duncan, 1987; Sharma & Nguan, 1999). One dimension through which managers make sense of, or interpret, strategic issues is as a threat versus as an opportunity (Dutton & Jackson, 1987; Jackson & Dutton, 1988; Sharma, 1997; Sharma *et al*., 1999; Thomas &McDaniel, 1990). Within the context of environmental responsiveness, Penner (1994), Sharma (1997) and Sharma *et al*. (1999) found that this threat – opportunity dimension is relevant to explaining corporate environmental responsiveness strategies (cited in Sharma and Nguan, 1999). Sharma and Nguan (1999) predict that the greater the degree to which a company's managers interpret environmental issues as opportunities, the greater the likelihood of the company undertaking voluntary or proactive environmental initiatives. Conversely, the greater the degree to which its managers interpret environmental issues as threats, the more likely the organisation will focus on conformance and undertake reactive environmental initiatives. Sharma (2000) confirms this point, finding differences in managerial interpretations to be influenced by certain factors in the organisational context, including the legitimation of environmental issues as an integral aspect of corporate identity and the discretionary slack available to managers for creative problem solving at the interface of the business and the natural environment.

Bansal and Roth (2000) also suggest that decisions on environmental action vary depending on how salient the environmental issue concerned is perceived to be. Issue salience is defined by Bansal and Roth (2000, p.728) as “the extent to which a specific ecological issue has meaning for organisational constituents”. Often, the extent to which an issue is reported in the media has an effect on the salience of that issue for the public (Mair & Jago, 2010). This could be interpreted as a social force in reference to the recognition and importance of climate change in the context of the general public, stakeholders and consumers. These forces should influence the extent to which an organisation feels pressured to respond to climate change, based on those who recognise its importance.

The support and commitment of top management is also considered to be a significant influence on the implementation of particular environmental practices (Hunt & Auster, 1990; Berry & Rondinelli, 1998), as well as the managers’ beliefs, expectations, perceptions and opinions (Fineman & Clarke, 1996; Banerjee, 2001 cited in Gonzalez-Benito & Gonzalez-Benito, 2006). Managers' interpretations or perceptions of their organisations' external environment are influenced by their own backgrounds and experiences [Aldrich & Pfeffer, 1976; Daft & Weick, 1984; Dutton & Jackson, 1987; Strandholm *et al.*, 2002], which may lead to variation in organisational responses even within the same industry (Strandholm, 2004). Of the managerial level factors of influence, these include issue legitimation, discretionary slack, risk propensity, perspectives on environmental regulation, and management responsibility and commitment.

2.7 Chapter Summary

This chapter has considered several models which contribute to our understanding of the motivations, drivers and barriers as well as the contextual factors which influence corporate responses to social and environmental issues such as climate change. The Bansal and Roth (2000) Model of Corporate Ecological Responsiveness was introduced as a foundational model based on three motivational logics and contextual variables which influence corporate environmental responses. Their model addresses the main research questions of this thesis and has been tested empirically in a number of industry sectors. It will therefore serve as a useful framework for this study, which will explore the motivating logics and contextual variables behind corporate responses to climate change across a number of industry sectors in New Zealand. Their use of exemplary quotes illustrating the motivations, as shown in Figure 2 of Appendix Section 1, will also serve as an effective way of categorising and displaying the data collected in this thesis. Similarly, their table presenting the factors of influence behind the motivations, as shown in Figure 4 of Appendix Section 1, will further inform the analysis of data generated from this thesis.

This chapter also considered how institutional pressures predict homogeneity in corporate responses, and the limitations of institutional perspectives in explaining the divergence in corporate behaviour. Other strands of research explored the variation in the external pressures that organisations are exposed to and inter-organisational differences. These inter-organisational differences relate to organisational characteristics such as size and ownership structure, internal capabilities and constraints, industry sector, exposure to competition, and stakeholder pressure. This chapter also considered the literature devoted to exploring the role of specific organisational characteristics which influence organisational perceptions and responses to climate change, and more specifically, how they may influence and drive the differentiation strategies that New Zealand organisations will adopt. Finally, the managerial level factors which influence organisational environmental responses were considered. The findings of these studies will be taken into account in the analysis of the results of this study, to see if they can enrich our understanding of the divergence in corporate responses to climate change beyond the Bansal and Roth model of ecological responsiveness.

Chapter Three: Setting the Context - Understanding New Zealand Climate Change Policy

3.1 Introduction

To understand corporate responses to climate change in New Zealand, it is important to introduce the state of international negotiation on climate change and its influence on New Zealand's environmental policy. First, this chapter will review New Zealand's history of environmental reform, particularly neoliberalism, so as to provide the context for understanding New Zealand climate change policy. Neoliberalism has shaped certain elements of environmental reform, and these elements have played a role in what policies are selected as the New Zealand government responds to climate change.

Then, the industry specific details of New Zealand's greenhouse gas profile and their importance in the national economy will be reviewed. This provides an important foundation for understanding the uniqueness and complexity of issues that climate change presents to New Zealand and how this has influenced public and corporate opinion of regulation for emission reduction.

3.2 Neoliberalism and Environmental Policy

Since the 1970s, neoliberalism has emerged as a predominant mode of regulation in an effort to encourage economic prosperity and to entrench individual rights. Neoliberalism is both an economic and political philosophy that questions the way in which government regulates the marketplace through controlling the allocation of resources on the basis of competition and placing responsibility for well-being on the individual (Larner, 2005). Within contemporary environmental policy, neoliberalism has shown expression in the term "market environmentalism," a mode of resource management that its proponents argue promises "a virtuous fusion of economic growth, efficiency and environmental conservation" through market means (Bakker, 2005: 543). In relation to climate change, it is argued that properly designed and implemented, market-based instruments – regulations that encourage appropriate environmental behaviour through price signals rather than through explicit instructions – provide incentives for businesses and individuals to act in ways that further not only their own financial goals but also environmental aims such as reducing waste, cleaning up the air, or reducing water pollution (Stavins & Whitehead, 2005: 229). Proponents of market environmentalism assert that environmental goods will be more efficiently allocated if treated as economic goods through establishing private property rights, employing markets as allocation mechanisms, and incorporating environmental externalities through pricing. In this way, market environmentalism attempts to simultaneously address concerns over environmental degradation and inefficient use of resources (Bakker, 2005), suggesting that markets will be deployed as the solution rather than being the cause of environmental problems.

Neoliberalism emerged in New Zealand, and indeed world-wide, as a political response to economic pressures and a means to restore conditions of economic stability. Before the 1970s, New Zealand citizens enjoyed a relatively high standard of living and the government was highly regarded (Cowen, 1997). However, New Zealand's economic situation began to deteriorate during a significant recession in the 1970's, as did most industrialised countries' economic performance. This was followed by a period of increasing inflation, spiralling international debt and the possibility of a foreign exchange crisis (Cowen, 1997: 345). After the election of the fourth Labour government in 1984, New Zealand began to experiment with neoliberal policies in an attempt to alleviate this economic crisis, including a series of market-oriented reforms (Peck, 2004: 401). These reforms soon began to extend into non-economic areas of public policy, setting the scene for bold and comprehensive innovation in environmental (and other) institutions, much of which was unprecedented at the time (Bührs & Bartlett, 1993 cited in Bührs, 2003).

This began with the passing of the Environment Act of 1986 which triggered a period of reform in the structure of environmental governance (Palmer, 1990). This was followed by the Resource Management Act (RMA) in 1991, which intended to create "rational and streamlined procedures for decision-making [in regards to] environmental planning and provide an integrated focus on natural resources (land, air, water, geothermal and mineral)." These innovations generated much interest internationally, and solidified New Zealand's status as an environmental leader (Bührs, 2003). While the basis of these reforms has been founded on a belief in the ability of market forces and public sector bureaucracy to accommodate environmental demands (Memon, 1993: 120), others believe that deregulation and movement to the market may possibly reduce the power to implement strategies to eliminate negative environmental effects (Pool 1997: 10 cited in Buhrs, 2003).

It is well recognised that many environmental issues and risks generate conflict, and have the potential to undermine the legitimacy of governments and neoliberal projects (Beck, 1992 cited in Larner, 2000). While neoliberalism has become one of the most powerful ideological and political projects in global governance, it has been widely criticised in academic literature (McCarthy & Prudham, 2004). While neoliberalism is by definition ideological, in the sense of being based on political values and views about 'appropriate' governance, it is applied as a body of technical ideas and prescriptions which are aimed at promoting general values, like efficiency, accountability and the public interest (Buhrs, 2003). Many scholars, however, have challenged the notion of market environmentalism claiming that its prescriptions are, "oversimplisitic, misleading, and hyperbolic" (Blumm, 1992: 372), and that it has led to uncertain and contradictory social and environmental outcomes (Blumm, 1992; Funk, 1992; Menell, 1992 cited in Mansfield, 2004; Prudham, 2004). While these scholars do not deny that free-market approaches may have some role in finding effective solutions to environmental problems, they argue that the idealistic propositions of free-market solutions are unreasonable (Funk, 1992).

These authors argue that policies do not evolve in a vacuum but are conditioned by the historical-institutional contexts wherein they are made, which embed cultural preconceptions of the "correct" way to solve policy problems (Bailey, 2007). In this way, the very idea of a stable, prevailing national policy style overlooks the basic dynamics of policymaking involving unequal power relations within networks of actors with conflicting ideas and interests (Richardson, 2000).

As noted in Kirk (2008), there are two principle arguments against so called free-market environmentalism. Firstly, free-market initiatives often ignore the uneven distribution of resources and money amongst particular groups in society, of which some may have less capability to afford to protect the environment, and in many cases more capital could be gained from exploiting the environment as opposed to preserving it. Secondly, free-market environmentalists ignore the fact that the destruction of ecosystems is often seen as a moral problem, as opposed to a simply utilitarian calculation (Funk, 1992). In fact, many argue that there are no sufficient mechanisms to adequately place a value on environmental concepts such as climate change and pollution prevention (Kirk, 2008), because these impact environmental systems that are common resources which anyone can freely exploit (e.g. tragedy of the commons). [1]

Neoliberalism continues to inform recent thinking on climate change policy. The search for effective and efficient climate policy has led to a major expansion in the use of market-based instruments, such as emissions trading, at national and international levels (Bailey, 2007). This trend, Bakker (2005) argues, has radically rewritten the priorities of environmental policy, instilling cost-efficiency, competitiveness, and the prioritisation of market processes in addition to environmental protection as core elements of effective environmental regulation. Yet the extent to which the business community (referred to here as the organisations obligated to reduce emissions under Emissions Trading legislation) is willing to take responsibility for environmental problems may become a significant limitation of neoliberal theory. Indeed, cooperation among the principal actors, including individuals and the business community, remains to be seen in the highly controversial debate over the implementation of climate change policy, both in New Zealand and internationally.

[1]The tragedy of the commons refers to a dilemma first described by Garrett Hardin in the journal *Science* in 1968. The article describes a situation in which multiple individuals, acting independently, and solely and rationally consulting their own self-interest, will ultimately deplete a shared limited resource even when it is clear that it is not in anyone's long-term interest for this to happen. In the context of climate change, the atmosphere is seen as the commons, and the tragedy is the universal pollution of the atmosphere by various individuals and countries around the world. Source - Garrett Hardin, "The Tragedy of the Commons", *Science*, Vol. 162, No. 3859 (December 13, 1968), pp. 1243-1248.

By introducing the history of environmental policy development in New Zealand, it is possible to examine the emerging discourses over neoliberal climate change policy. Only by theorising neoliberalism as a controversial and contradictory phenomenon can we appreciate the contestations and struggles that have engaged policy debates (Larner, 2000). This section has shown that New Zealand has a strong foundation of neoliberal environmental policy, from the significant environmental reforms in the 1980s, to the more recent emergence of climate change policy. In the next section, the Government's approach to climate change policy will be considered in the context of international climate change negotiations and the unique challenges that New Zealand faces in achieving emissions reductions.

3.3 Development of New Zealand Climate Change Policy

Climate change is now widely recognised as an international environmental issue of increasing importance to politics and business. As described in Chapter One, by the creation of the United Nations Framework Convention on Climate Change (UNFCCC) in 1992, the development of the Kyoto Protocol in 1997 and the 2009 Climate Summit in Copenhagen, the importance of countries making obligatory commitments to emission reduction has become more widely recognised. Three common methods have been proposed by various countries to achieve these targets including regulations, taxes and emissions trading. Regulations involve placing legal restrictions on activities that cause greenhouse gas emissions. They are often costly to comply with and to administer, and they are not always effective because it is difficult to design regulations that achieve the right balance of costs and benefits, and hence result in the right level of emissions. Taxes and emissions trading are two priced-based measures for reducing emissions. They work by increasing the cost of activities, such as production and consumption that result in greenhouse gas emissions. Taxes increase prices directly by imposing an additional charge on activities that cause emissions. Emissions trading[2] is an approach which aims to restrict the quantity of emissions, and allow markets to set a corresponding price to encourage emissions reductions (Ministry for the Environment, 2007). Emissions trading is

[2] Emissions trading (also known as cap and trade) is an administrative approach used to control pollution by providing economic incentives for achieving reductions in the emissions of pollutants. A central authority (usually a governmental body) sets a limit or cap on the amount of a pollutant that can be emitted. Companies or other groups are issued emission permits and are required to hold an equivalent number of allowances (or credits) which represent the right to emit a specific amount. The total amount of allowances and credits cannot exceed the cap, limiting total emissions to that level. Companies that need to increase their emission allowance must buy credits from those who pollute less. The transfer of allowances is referred to as a trade. In effect, the buyer is paying a charge for polluting, while the seller is being rewarded for having reduced emissions by more than was needed. Thus, in theory, those who can reduce emissions most cheaply will do so, achieving the pollution reduction at the lowest cost to society. Montgomery, W.D. "Markets in Licenses and Efficient Pollution Control Programs". Journal of Economic Theory 5 (December 1972):395-418

intended to provide a least-cost solution to climate change, and as such, represents a more neoliberal policy approach to encouraging emissions reductions.

The New Zealand Government has recognised that addressing climate change is vital to avoid New Zealand's adverse impacts on the natural environment, and to maintain quality of life for present and future generations, as well as to preserve its green and clean brand which a majority of the economy (tourism and exports) invests in and relies upon (New Zealand Government, 2007). Further, New Zealand has an obligation to respond to climate change under its international commitments to the United Nations Framework Convention for Climate Change and the Kyoto Protocol.

Successive New Zealand governments have developed and revised different policy packages over the years in order to meet and manage New Zealand's Kyoto obligations in the first commitment period (2008-2012) and beyond. These include a carbon tax measure which was announced in 2002 and cancelled in 2005 due to significant opposition from the business community (particularly the agriculture industry) and other political parties (Buhrs & Christoff, 2006). Following further rounds of public consultation, the feedback from numerous submissions showed broad, although not universal, support for the use of emissions trading as the preferred approach for emissions reduction (Ministry for the Environment, 2007). In October 2007, the Government announced its new package of climate change policies, including an Emissions Trading System (ETS) and supporting sustainability initiatives. The Government decided that an Emissions Trading Scheme (ETS) offered New Zealanders the most flexible, effective, fairest and least-cost option for reducing greenhouse gas emissions. This scheme was further justified by the fact that a number of countries had adopted such schemes, and economic modelling predicted the impact on growth to be minimal (Ministry for the Environment, 2007). The ETS was planned to be implemented on a nation-wide level, including all emitting industries and sectors (New Zealand Government, 2007) and was the first country to include agriculture and forestry in an emissions trading scheme. Despite public consultation, the ETS was still very controversial and required extensive amendments before it was eventually passed in September 2008.

Nevertheless, when the National Party coalition government ended the nine year reign of the Labour Party led government by winning the general parliamentary election in November 2008, it was decided that there were significant flaws in the design of the ETS which would be detrimental to the New Zealand economy. The ETS would therefore be reviewed and a carbon tax would be reconsidered. Following this decision, the government called for another round of submissions from the general public on their recommendations for New Zealand's climate change policy. Further amendments were made and a revised version of the ETS was again passed into law in late 2009.

The extensive political debate in New Zealand over the design and approach of climate policy reflects the controversial nature of environmental issues and of the application of neoliberal political approaches to their solution. These problems are further compounded by the fact that New Zealand faces unique and significant challenges in relation to climate change that are particularly controversial in the business community. The next section will examine the features of New Zealand's industrial setting which make climate change a particularly challenging and contestable issue.

3.4 New Zealand Industry and Greenhouse Gas Profile

To understand the implications of climate change regulation in New Zealand it is important to consider the unique nature of New Zealand's industrial landscape and greenhouse gas profile. In particular, the relationship between New Zealand's economy and greenhouse gas emissions plays a significant role in the controversy over climate change mitigation. In this section, I will outline the profile of New Zealand's economy and the primary industry sectors in relation to their contribution to both the New Zealand economy and greenhouse gas emissions.

3.4.1 Economic Profile

New Zealand has an export-dependent economy, operating on free market principles. The agricultural, horticultural, forestry, mining and fishing industries play a fundamental role in New Zealand's economy, particularly in the export sector and in employment. Overall, the primary sector accounts for 7 per cent of gross domestic product (GDP) and contributes 64 per cent of New Zealand's total merchandise export revenue (Treasury, 2009).

New Zealand remains reliant on exports of commodity-based products as a main source of export receipts and relies on imports of raw materials and capital equipment for industry. In addition, energy-based industries (including dairy processing, and cement and steel manufacturing), forestry, mining, horticulture, and tourism have expanded rapidly over the past two decades and make significant contributions to the economy (Ministry for the Environment, 2009a).

In relation to the structure of its industrial sector, New Zealand has an uneven representation in the size of organisations. There is a predominance of small and medium sized organisations in New Zealand, with 97% of enterprises having fewer than 20 employees (particularly in the tourism industry) but only accounting for only 31% of all employees. There are over 70,000 enterprises in the agriculture, forestry and fishing industry, which engage over 100,000 employees. Conversely, enterprises with 100 or more employees make up less than 1% of the total number of enterprises in New Zealand but employ 47% of the total number of employees (Statistics NZ, 2009). Thus, while there are few large organisations in New Zealand, they are its predominant source of employment.

3.4.2 Energy

The energy system as defined by the UNFCCC includes the exploration and exploitation of primary energy sources, the conversion of primary energy sources into more useable energy forms in refineries and power plants, the transmission and distribution of fuels, and the use of fuels in stationary and mobile applications. New Zealand is currently self-sufficient in electricity and gas, and is a net exporter of coal. While New Zealand does refine its own oil, due to its high quality and consequent value, most of New Zealand's oil (96 percent) is exported unrefined. Almost all of the oil consumed in New Zealand is imported and refined domestically (Ministry for the Environment, 2009a).

In 2008, the oil sector was made up of nine companies producing oil, one refinery, five wholesalers, a range of independent distributors and five main oil retailers. The country's only oil refinery, at Marsden Point, is owned jointly by four oil companies and produces around 68 percent of New Zealand's oil-based fuels. The gas industry is in private ownership (Ministry for the Environment, 2009a).

The electricity generation sector is dominated by five major firms, of which three are state-owned enterprises. There are some 40 major electricity generation stations connected to the grid. The stations are owned and operated by several main generator companies which compete to supply electricity to retailers. The market is regulated by the Electricity Commission, which also has a mandate to promote efficiency initiatives (Ministry for the Environment, 2006).

New Zealand's electricity generation is predominantly by renewable sources, with hydroelectric power producing around 60 percent of annual generation (depending on rainfall). Geothermal makes up around 7 percent with smaller contributions from other renewable sources such as biogas, waste heat, wood, and wind. The balance is made up of fossil fuel generation, predominantly gas, but with coal making an increasing contribution. In 2007, electricity contributed 9 percent to New Zealand's total greenhouse gas emissions, an increase of 91 percent from 1990. This rise was due to an increase in thermal generation, particularly in coal (Ministry for the Environment, 2009b).

The energy sector makes the second largest contribution to New Zealand's total greenhouse gas inventory at 43 percent as of 2007 (behind agriculture at 48 percent), while industrial processes constitute just over 6 percent. Manufacturing emissions and other sectors are relatively stable and reflect the dominance of a small number of large industrial plants (Ministry for the Environment, 2009b). Figure 1 below shows the distribution of New Zealand's energy related emissions, primarily associated with transport, electricity generation, and manufacturing industries.

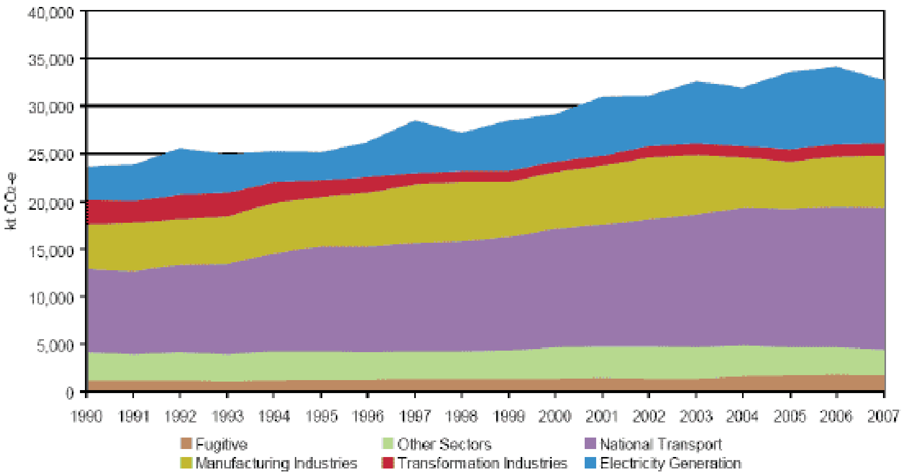

Figure 1 shows the reported emissions from the energy sector from 1990 to 2007 as reported in MED's publication "The New Zealand Energy Greenhouse Gas Emissions 1990–2007". Source: Ministry for Economic Development. (2009). Energy Greenhouse Gas Data 2009.

Emissions from the energy sector are now over 38 percent above the 1990 baseline value. The sources contributing most to this increase since 1990 are emissions from road transportation (an increase of 58%) and public electricity and heat production (an increase of 83%). Emissions from transport now account for 46 percent of the energy sector's greenhouse gas emissions, and, since 1990, have grown at an average rate of over 3 per cent a year in line with population and economic growth (See Figure 2 below for Emissions from Fuel Combustion). Electricity emissions have also grown and have shown increased variability in relation to the amount of precipitation and the increased reliance on coal generation during times of drought. Greenhouse gas emissions from public electricity and heat generation are now 19 percent of total energy greenhouse gas emissions (Ministry for the Environment, 2009b).

The nature of New Zealand's transport system has been influenced by the distribution of the small population over two main islands, and underdeveloped public transport insfrastructure. New Zealand has one of the highest rates of car ownership in the world. For a population of just over four million, there are around 3.6 million registered vehicles on New Zealand's roads, 69 percent of which are passenger motor vehicles. As with other developed countries, transport in New Zealand is energy intensive and relies on fossil fuels. In 2007, transport contributed 20 percent of New Zealand's total greenhouse gas emissions, an increase of 70 per cent from 1990. Road transport is the largest contributing source of these emissions (Ministry for the Environment, 2009b).

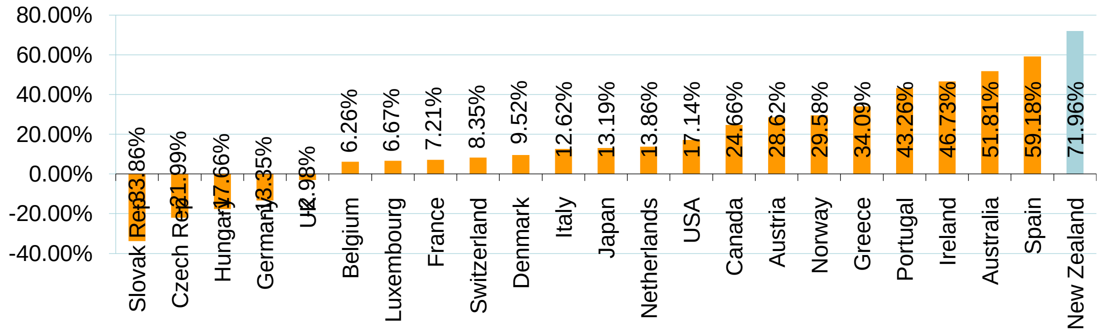

Figure 2: Percentage change in CO_2 Emissions from Fuel Combustion for OECD Countries in 2006 Relative to 1990. Source: Ministry for Economic Development. (2009). Energy Greenhouse Gas Data 2009.

Figure 2 (above) shows an indication of the global trends in carbon dioxide emissions from fuel combustion amongst different countries. These estimates from the IEA show that carbon dioxide emissions from fuel combustion in New Zealand increased by 72 percent since 1990, compared to the rate of increase for total global fuel combustion emissions of 33 percent (Ministry for Economic Development, 2009). Such a significant increase in fuel related emissions is a significant area of concern for regulating greenhouse gas emissions.

3.4.3 Agriculture

Agriculture dominates land use in New Zealand at over 45 percent of total land use, comprising over 66,000 economically sustainable farms and up to 120,000 small holdings in New Zealand that are part-time ventures, lifestyle properties or forestry investment blocks. The agriculture sector is New Zealand's largest export earner, earning 53 percent of New Zealand's total merchandise export value in the year to June 2004. When exports of services are included, the dairy industry alone (which is the single largest merchandise export industry) is not far behind tourism in its claim to be New Zealand's largest total export earner. New Zealand is the world's largest single-country exporter of dairy products and sheep meat, has the world's most profitable kiwifruit industry, and is a significant player in other areas such as pip fruit and wool (Ministry for the Environment, 2009a).

Since the neoliberal reforms of 1984, the Government's commitment to economic liberalisation, which included the removal of most agricultural support, impacted on agriculture by shifting production away from sheep to dairying, deer, and horticulture (fruit, vegetables, and vines), and shifting land use from pastoral land to forestry. This resulted in the expansion of dairy cows by 50%, deer by 65%, horticulture and grape vines by over 20 percent, and forestry plantations by 40%. Over the same period, sheep numbers declined by 28 percent. Total annual nitrogen fertiliser use has increased by a factor of approximately six between 1990 and 2003 with phosphate fertiliser use remaining relatively static (Ministry for the Environment, 2009a).

Agricultural productivity has improved substantially over the past fifteen years, primarily as a result of technological changes and efficiencies. The use of irrigation is also predicted to increase in conjunction with the projected increase in the incidence and severity of drought as a result of climate change (Ministry for the Environment, 2009a). The water usage of irrigated agriculture is of increasing concern throughout the country.

3.4.4 Forestry

New Zealand's first planting of commercial exotic forests began in the 1920's. Over the last 50 years, the timber industry has transitioned from the commercial logging of indigenous forest to one based almost entirely on planted (exotic) forests, which covers over six percent of New Zealand's land area. In 1995, forestry contributed almost 13 percent of merchandise export income. More recently, as dairying, horticulture, and meat industries began to grow, forestry's contribution to export earnings has decreased, but it remains the third largest merchandise export earner for this country and an essential and major contributor to earnings (Ministry for the Environment, 2006). The timber industry is, however, a small player in the international forestry market, accounting for only 1% of the world's total supply of industrial wood and forest products.

The other industries discussed in this section are among the heaviest emitters and biggest contributors to New Zealand's total greenhouse gas emissions. Businesses in these industries, by nature of their operations – manufacturing or distribution – consume, and rely on, a large amount of fossil fuels and emit carbon accordingly. The forestry industry, in contrast, has a different relationship with climate change legislation than other industries, as forests absorb atmospheric carbon and thus help to reduce a country's overall greenhouse gas emissions. Foresters are therefore included in the NZ ETS to provide incentives for forest planting and discourage de-forestation, with forest owners liable to pay for the emissions released from harvesting. However the pulp and paper industry does rely heavily on fossil fuels and stationary energy in its operations, and will therefore also be negatively affected by the increased operational costs imposed by the NZ ETS (Bui, 2009).

3.5 Industry Tensions and Greenhouse Gas Emissions

As a developed country, New Zealand has a particularly difficult set of issues for emissions reduction, largely as a result of its unique emissions profile. New Zealand's greenhouse gas emissions profile is different from that of many other countries. Nearly 50 percent of New Zealand's greenhouse gas emissions are from agriculture, compared to an average of 12 percent in other developed countries. However, New Zealand constitutes less than one percent of global greenhouse gas emissions. Reducing greenhouse gas emissions in agriculture is a significant challenge, as many agricultural activities have a direct relationship between output and greenhouse gas emissions. While New

Zealand is heavily invested in research to develop technologies and management practices that reduce methane emissions from ruminant livestock, the scope of reductions these may eventually achieve may be minimal. See Figure 3 for an overview of New Zealand's Greenhouse Gas profile by industry sector, and see Figure 4 for an overview of New Zealand's greenhouse gas emissions and renewable energy generation in comparison with other countries.

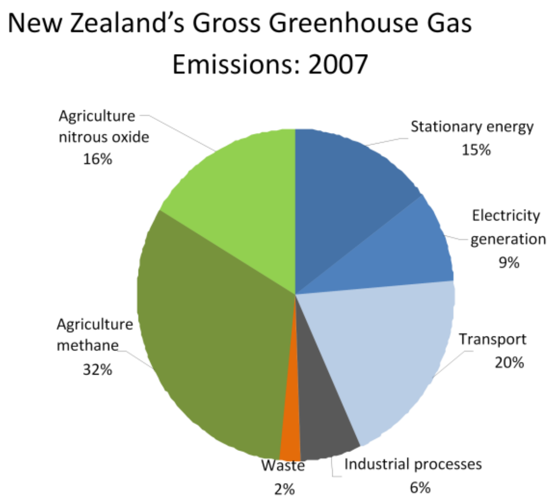

Figure 3 shows New Zealand's Greenhouse Gas Emissions 1990-2007 by sector. Source - New Zealand's Greenhouse Gas Inventory 1990 – 2007: http://www.mfe.govt.nz/publications/climate/

As mentioned, much of the New Zealand economy is based on agriculture and forestry. Nearly half New Zealand's land area is used for primary production, with 39 percent of the total land area in pasture and 7 percent in planted production forest. These sectors are vulnerable to changes in the world's climate, both environmentally and economically (Ministry for the Environment, 2007a). Forty nine percent of New Zealand's total greenhouse gas emissions come from agriculture, the result of methane from ruminant livestock and nitrous oxide from animal excrement and fertiliser. At the same time, forest cover represents the largest potential carbon sink (reducing atmospheric carbon through the absorption of carbon during photosynthesis), a role that has been more recently under threat, with a significant decline in new plantings and increasing deforestation of land being converted to other uses. Considering the significance of these sectors for both the economy and climate change policy, their combined impact on greenhouse gas emissions make land use (and land use change) an important issue in climate change policy in New Zealand (Ministry for the Environment, 2007a). As a result, there has been increasing debate and concern about the potential impact of the New Zealand Emissions Trading Scheme (ETS) on both the agriculture and forestry sectors, as well as upon other sectors having significant liabilities under the scheme.

Some opposition to the ETS argues that the design of the scheme fails to appropriately acknowledge the impact on these sectors. A report by The New Zealand Institute for Economic Research (NZIER) claims that emissions trading is not the most cost efficient scheme for reducing emissions, negatively impacting on pricing, land value, export earnings and employment (NZIER, 2008). Specifically, the report finds that the agricultural industry, a vital sector in the New Zealand economy, will be significantly impaired by emissions trading as opposed to general taxation. In addition, with 70 percent of the nation's energy derived from renewable sources, New Zealand has little scope for improvement in energy efficiency. As many New Zealand organisations face international competition from organisations without climate change limitations, emissions trading has therefore become a particularly challenging issue for businesses in New Zealand.

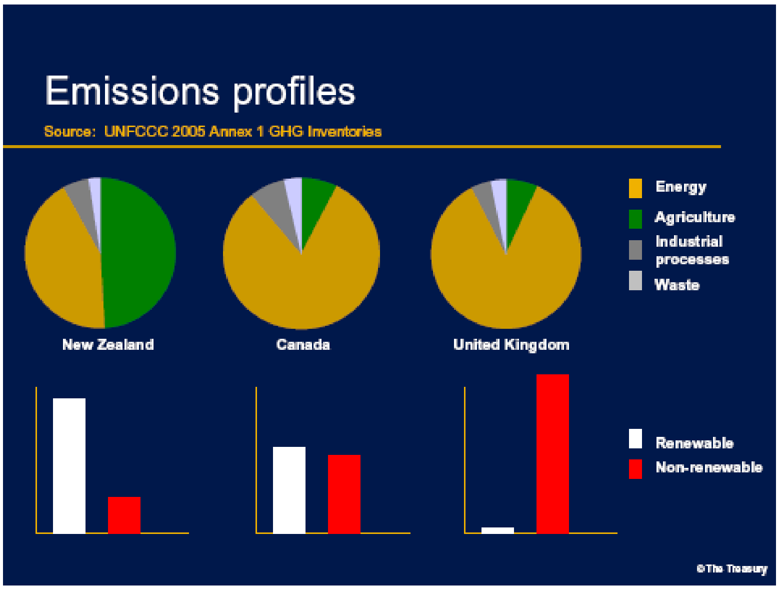

Figure 4: Emissions Profiles of New Zealand, in comparison with Canada and the United Kingdom. Source - www.treasury.govt.nz/

The capacity of New Zealand to offset emissions through plantation forestry is also limited, as there is limited capacity for further plantations, and forests are increasingly being harvested in the conversion to more profitable agricultural practices. Any deforestation will only increase New Zealand's total emissions inventory and hence the cost of the nation's Kyoto liability. These issues put New Zealand in a unique position internationally, as it attempts to protect its 'clean and green' image and implement climate change policies which may be detrimental to the economy.

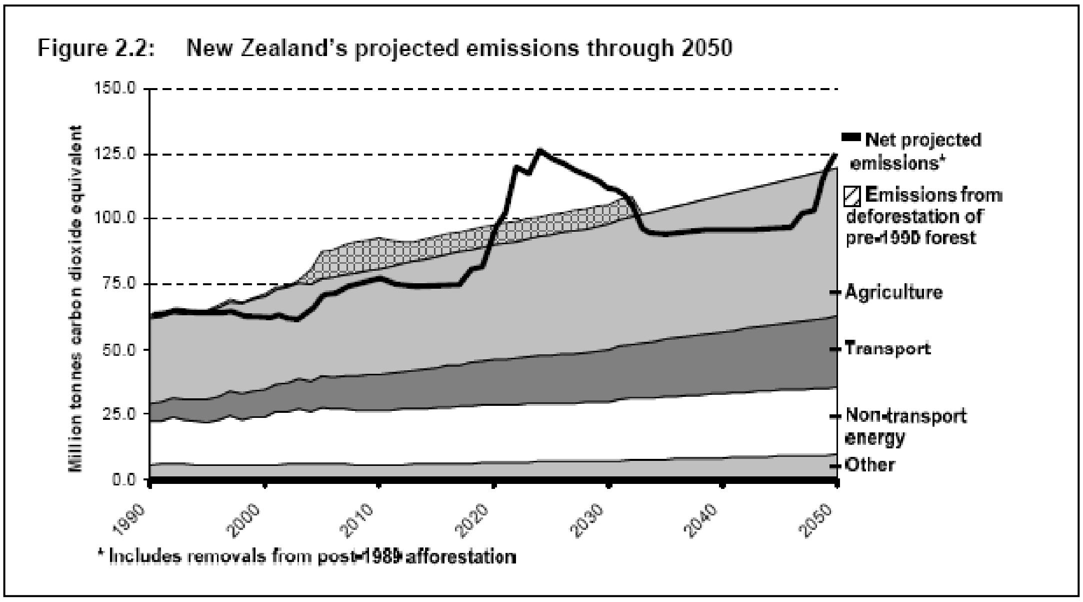

Figure 5 shows the trends in New Zealand's greenhouse gas emissions, by sector from 1990 to 2007. **Source:** Ministry for the Environment 2009. *New Zealand's Greenhouse Gas Inventory 1990–2007.*Wellington: Ministry for the Environment.

New Zealand's GHG profile continues to increase since its commitment to reduce emissions to 1990 levels under the Kyoto Protocol (see Figure 5 above). There has been significant uncertainty in relation to New Zealand's GHG emissions profile over recent years, primarily due to the uncertainty in emissions calculations and assumptions. While New Zealand is currently within its commitment limits under the Kyoto Protocol, this liability has been highly variable, ranging from a 45.5 million tonnes deficit, to a current 9.6 million surplus (Treasury, 2010). While the extent of New Zealand's position in relation to its Kyoto liability is variable, what is certain is that New Zealand's profile has increased by 14 million tonnes (22%) from 1990 – 2007 (NZIER, 2008), demonstrating an unsustainable growth in emissions which will be a significant problem for New Zealand in the future, and for the business community that will be affected by emission reduction policy.

3.6 Chapter Summary

For many years, New Zealand climate change policy has been actively contested among the public, the corporate and the political communities. The reason for this ongoing debate stems from an unsustainable growth in emissions from sectors primarily associated with export industries which play a significant role in New Zealand's economic development and maintaining its current standard of living. The ability of New Zealand to reduce these emissions is particularly challenging. Addressing climate change is vital to avoid adverse impacts on the natural environment, and to maintain quality of life for present and future generations, as well as to preserve New Zealand's green and clean brand which a majority of the economy (tourism and exports) invests in and relies upon (New Zealand Government, 2007). This chapter has explored the history of environmental policy in New Zealand,

and neoliberalism in particular, and how this has influenced the shape of current climate change policy. This provides an important foundation for understanding the uniqueness and complexity of issues that climate change presents to New Zealand and how this has influenced public and corporate opinion of on emission reduction policy. Understanding the nature of these problems and the structure of New Zealand's industrial community is important in conducting the research, interviewing the research participants and reflecting on the data which emerged from these interviews. The next chapter will introduce the concept of narrative analysis as a theory and methodology for this research. This approach is applied as an analytical strategy to shed light on managerial perspectives and the motives behind organisational climate change responses that emerged from the interviews.

Chapter Four: Narrative Analysis Theory and Methodology

4.1 Introduction

In this thesis I examine narrative data from interviews with a group of managers from New Zealand organisations directly affected by climate change legislation – in this case the proposed Emissions Trading Scheme (ETS). I explore how the concept of climate change is perceived by senior managers and their organisations' climate change responses, using narrative discourse analysis as a methodology to uncover the motivations, drivers and barriers behind managerial perceptions and corporate activities in relation to climate change.

This chapter introduces the concept of narrative analysis as a theory and methodology for research. It begins with a consideration of narrative and discourse analysis and its research applications. The next section then considers its appropriateness for application in organisational research, and its limitations. The final section will discuss how narrative analysis will be applied to my study.

4.2 Narrative Analysis and Applications in Organisational Research

Narrative analysis is a subfield of discourse studies, and has been applied across a range of research areas including climate change (Bailey, 2007; Boykoff, 2007), organisational behaviours (Sveningsson & Alvesson, 2003), and corporate environmental reporting (Tregidga & Milne, 2006). Discourse analysis as a qualitative methodology is also widely used in the fields of human geography (e.g. Lees, 2004; Wiles et al., 2005). Lees (2004) describes discourse as a specific series of representations, practices and performances through which meanings are produced, connected into networks and legitimised. Stressing the desires, imaginaries, ideologies and metaphors that work to produce textual products that both reflect and shape relations of power, discourse analysis methods are concerned with investigating how language and written texts are used to shape and influence behaviour (Lees, 2004). Discourse analysis can be used to try and interpret the collective meaning of words and assess their credibility and importance (Garrison & Massam, 2001), and allows the researcher to go 'beyond the face value aspects of what is said or written' (Hastings, 1999: 104).

Discourse analysis is capable of revealing the conditions behind a contested discursive issue, including the implicit assumptions or values held by the actors and the priorities they attach to the elements of the problem. Because agents are politically, culturally and historically situated, these concepts are always contested with struggles and contradictions emerging over their meaning, interpretation and execution (Sharp & Richardson, 2001). This method can be applied in the context of corporate responses to a complex issue such as climate change, where there are many interpretations of science, accountability and social responsibility. In this research, discourse analysis may allow the underlying drivers and barriers to corporate understanding and responses to be brought to light, by exploring the narratives which emerge from interviews with the research participants.

Alvesson and Sköldberg (2000: 93) consider that 'all discourse is in some way narrative', because in speaking we are constructing a narrative of our lives. Such narratives embrace technical, academic, and everyday language, and are context dependent (Cunliffe et al., 2004). A narrative is commonly referred to as an oral or written 'recital of a series of events ... a story'. Narratives are useful data because individuals often make sense of the world and their place in it through narrative form. Through telling their stories, people distill and reflect a particular understanding of social and political relations. Stories are a common, habitual method people use to communicate their ideas (Feldman, 2004). In fact, ''all classes, all human groups, have their narratives . . . narrative is international, transhistorical, transcultural: it is simply there, like life itself'' (Barthes, 1977: 79 cited in Feldman, 2004).

Narrative analysis explores the use of stories as a primary way of making sense of an experience (Mishler, 1986), and is based on the assumption that we make sense of our experience through integrated and sequenced accounts or stories (Polkinghorne 1988; Weick 1995), and that researchers can study and interpret those stories as a means of understanding organisational processes and events (Cunliffe et al., 2004).

The mission of narrative research is to interpret the stories people tell (Riessman 1993). Exploring ''how protagonists interpret things'' (Bruner, 1990: 51), narrative analysts tend to ask why the story was told that way and what the storyteller means (Franzosi 1998) by looking at form, structure, and content (cited in Feldman, 2004). The information presented in the narrative is valuable, through the events the narrative includes, excludes, and emphasises. The research participant, therefore, not only illustrates his or her version of the action but also provides an interpretation or evaluative commentary on the subject (Feldman, 2004). Narratives also have the additional benefit of highlighting recurring themes, but not in such a way that presents a "smoothed set of generalizations that may not apply to a single 'interview'" (Huberman & Miles, 1994: 435 cited in Bebbington et al., 2009).

However, it is important to recognise that a study of narrative discourses rests on a set of assumptions concerning the constructive effects of language, the researcher's position and the organisational as well as the wider social context (Soderberg, 2006). Narrative discourse analysis is not simply a process of data collection, analysis and interpretation of texts, but it relies on the assumption that social reality cannot be approached and understood separately from discourse (Soderberg, 2006). An organisational reality is produced through the discourses that frame the organisational actors' sense of who they are, and it is the discursive practices of various organisational actors that shape the organisation and frame their sense of who they are and what the organisation stands for (Soderberg, 2006). It is in this context that climate change can be seen as socially constructed by various discourses (e.g., discourses of risk, opportunity, liability and responsibility), produced by government, NGOs and organisational actors (Martin, 2002 cited in Soderberg, 2006). This study, therefore, examines the narratives about climate change which emerge from various organisational actors, allowing the research participants to tell their own story and construct their own discourses of risk, opportunity and liability – among others.

There are a variety of methodologies employed in narrative research, exploring how the narrator tells the story, and what is included or excluded (Feldman, 2004). Some researchers focus on the structural links among concepts or ‘‘semantic grammar,’’ showing that both the structuring of narratives and their content reveal key insights. Some researchers examine the narrative as a whole, whereas others break it down into component parts (e.g. Allport 1962; Lieblich, Tuval-Mashiach, & Zibler 1998 cited in Feldman, 2004). Narrative form is often considered to be defined by a sequence of events, experiences, or actions with a plot that ties together different parts into a meaningful whole (Czarniawska 1998; Franzosi 1998). Others (such as Young 1996) consider that the sequencing of narrative form is important, as its structure reveals what is significant to people about various practices, ideas, places, and symbols (Feldman, 2004). But whether taking a holistic or categorical approach, the researcher employs a particular methodology for narrative interpretation (Feldman, 2004).

In the field of organisation and management studies, ethnographers often use narrative methodologies to examine aspects of organisational life such as culture, processes, strategy, and member identities (e.g. Smart 1999; Luhman 2000). Using research methods such as participant observation, case studies, interviews, histories, biographies, and documentation from organisational members, researchers access narratives and analyse their mimetic content, that is, what the stories say. Storylines and characters can also be seen to mimic or reconstruct reality, and mimetic perspectives can help to establish the link between the content of stories (narrative properties) and organisational issues (Cunliffe, 2004). In addition, narrative research may also investigate how the story is told, who narrates it, and how they may be different, known as the diegetic perspective of storytelling (Ryan, 1992). Narratives may construct the same events differently and interpret the actions of the selected actors from different points of view. For example, if narrative analysis reveals deep disagreement between members of an organisation, this would elicit the researcher to pose questions related to the company vision, strategy and organisational change processes (Boyce, 1996). In this context, narrative analysis can compare stories of employees to highlight the different emphasis and meaning given to particular issues (e.g. Maynard-Moody & Musheno, 2000 cited in Cunliffe, 2004).

Interpretive researchers, in contrast, are more concerned with the subjective and differing interpretations of participant narratives. Interpretive analyses often identify different communities of interpretation and how each community tells different stories of the same event (Cunliffe et al., 2004). They may use different storytelling resources, and reveal how different narratives may interweave and unfold to create new possibilities for action (Weick 1995; Gubrium & Holstein 1998). According to Cunliffe et al (2004) these narratives do not just tell us about the past, but they also offer a way to invent the future and to re-narrate organisational life.

This section has introduced the various theoretical approaches to narrative analysis and its applications to interview based organisational research. This approach is particularly useful in this thesis in order to examine the narratives of the organisational actors who are the subjects of this study, to reveal the underlying motivations, drivers and barriers associated with their responses to climate change.

4.4 Limitations of Narrative Analysis

It is also important to recognise that there are a number of limitations with narrative research perspectives. Stories are not facts and the selective use of narratives to promote preconceived ideas or agendas can be a problem (Soderberg, 2006). While my observations as a researcher are from direct interaction with the interviewees, it is important to see the data not as an objective reality but as a series of social constructions drawn from interview transcripts. For example, it is important to recognise that a narrative is also influenced by the narrator's audience (Soderberg, 2006). Narrators often want to create impressions of their rationality through their use of substantive arguments, to establish their authority as credible sources and convey an impression of their intelligence and professional experience. They may also make an effort to present themselves so that their emotions of anger, fear, admiration or indignation seem reasonable and worthy of the audience's empathy (Cheney *et al.* 2004 cited in Soderberg, 2006). What is more, narrators may use the researcher not only as their audience, but also as a potential mediator of their interpretations and their world-view. Therefore, an important aspect of narrative analysis according to Soderberg (2006), is to recognise and reflect on the quality of the social interaction between narrator and audience. These components of narrative analysis are useful in making sense of the narrators' impressions and positions, identifying story themes and assessing the links between values, reason and action of organisational managers in relation to climate change.

4.5 Analytical Strategy

Although the interpretation of narratives may seem to be relatively straightforward, it is important to employ rigorous methods of analysis for consistency and validity in qualitative research. This is important due to the very nature of narratives, because they frequently contain multiple meanings, and also because stories are loaded with embedded, sometimes hidden information that is lost during the transcription process (Feldman et al., 2004). The in-depth analysis of narratives can therefore provide insights into the understandings of the participants about the issues at hand (Feldman et al., 2004).

By revealing the process of interpretation, the researcher demonstrates to the reader his or her assumptions behind their research methodology, allowing the reader to assess the validity of the interpretation (Feldman et al., 2004). Describing the theory and method in such an interpretative study facilitates whether one rejects or accepts the findings as valid. However, this task is not straightforward. As noted by Lofland and Lofland, ‘‘Because of the open-ended and creative dimensions of the analytic process, a description of the concrete operations composing it does not entirely capture what goes on’’ (1995, 181). To this end, this chapter has attempted to thoroughly consider the theoretical underpinnings and methodological approaches to narrative discourse analysis. While there will always be room for others to add their perspectives on how to examine the narrative data, this chapter has tried to make the analytical strategy to be used in this thesis as clear as possible..

This thesis uses qualitative narrative analysis to capture the stories of those tasked with managing the climate change response of their respective organisation. As such, the narratives provide a condensed version of their responses provided during the interview period. While presented in the third person, they are designed to be the interviewees’ stories as told. The views expressed, therefore, are of the individuals interviewed and not the organisations themselves. Their stories provide the raw data for the analysis that is presented in Chapter Six and discussed in Chapter Seven in relation to the theoretical context introduced in Chapter Two.

4.6 Chapter Summary

This chapter has introduced the concepts of narrative and narrative discourse analysis as the theoretical underpinnings and methodological approach for analysis of interview data. Narrative discourse analysis investigates how narratives and stories are used to make sense of experience and reflect a particular understanding of social and political relation, or in the context of this research, organisational activity. It is capable of revealing the conditions behind a contested issue, including the implicit assumptions or values held by the actors and the priorities attached the problem (Sharp & Richardson, 2001). Incorporating a range of social, environmental and economic issues, climate change is inherently an interdisciplinary study; however there has been limited exploration of these issues in social science disciplines such as human geography. Interdisciplinary studies have the potential to provide some of the most interesting insights in academic research. Such a context adds further value to this thesis, as it incorporates theoretical insights from both geographic and corporate accounting literatures. Using narrative discourse analysis to integrate these disciplinary perspectives may therefore allow the underlying drivers and barriers to corporate responses to climate change to be brought to light.

Chapter Five: From Data Collection to Analysis - The Research Methods Applied in this Study

5.1 Introduction

This chapter presents the methods of research used to achieve the aims of this study. It begins by outlining the qualitative interview approach that was designed to gather the data for analysis. This includes a reflexive acknowledgement of myself within the study, a description of the ethical concerns and how they were addressed, the recruitment of the organisations and participants, and a description of the interview process. The chapter also reviews the application of narrative analysis which was introduced in the previous chapter. This includes a discussion of how I identified the key themes within the data and how the narratives, in respect of those themes drawing on the theoretical concepts from institutional and organisational theory, were analysed.

5.2 Approach to Qualitative Research Methodology

> "In general it is true to say that the quality of research results can be no better than the theoretical considerations that underlie the data collection and the methods derived from the theoretical approach. Theories define the framework for methods, methods determine conditions for concrete research operations." (Titscher, Meyer, Wodak & Vetter, 2000: 13).

Qualitative research is a methodology that enables researchers to find patterns in the words that individuals use to explain how they have come to view and understand their world (Richardson, 2000), and most people rely on words in order to make sense of any situation they find themselves in (Maykut & Morehouse, 1994). Individuals use words and sentences to explain their beliefs and experiences; a constitutive process that enables individuals to create their own particular view of reality and of the self (Richardson, 2000). To interpret these experiences and meanings, qualitative researchers must draw from a wide range of theoretical tools in order to report them in a descriptive way that represents each participant's story as accurately as possible (Maykut & Morehouse, 1994).

Qualitative researchers aim to understand the complexity and richness of people's experience (Denzin & Lincoln 1994), deliberately probing the abstract and the complex. They value subjective interpretations, exploring how meanings are constructed in a social context and how participants use past experiences to construct reality. Qualitative researchers argue that their results contain socially relevant insights and that they make a concerted effort to 'tell it as it is' (Jootun *et al*., 2009).

Based on Ferguson and Ferguson (1995) there are four tenets that distinguish a qualitative approach to data collection and analysis from quantitative, positivist research paradigms. Firstly, they argue that the social world is constructed and therefore, certain laws or scientific facts only exist because people attribute meaning to them. Human social action is fluid and unpredictable (Tolich & Davidson, 1999), and qualitative methods work to identify the various meanings behind individuals' actions (Aschcrof, 2006).

The second argument of Ferguson and Ferguson (1995) is that a researcher cannot separate facts from values as the two are interconnected. This is explained by Davies and Harré (2001) who suggest that as part of the discursive production of the self, individuals take on certain values and beliefs which inherently influence their perceptions and understandings of certain factual information. Beyond just gathering and dissecting information, research is also about understanding the data – the third tenet of Ferguson and Ferguson (1995). While quantitative researchers seek to ask "what," qualitative researchers attempt to develop a meaningful narrative of the particular phenomenon being studied by asking 'why?' (Wetherell, 2001). Moreover, it is also impossible (and may conflict with the study's intention) for researchers to remain neutral or objective in their observations, and this needs to be acknowledged as part of any research (Ferguson & Ferguson, 1995). When researchers fail to examine their own cultural assumptions under the pretence that they can remain neutral and objective in their observation of others, they are likely to include those assumptions within the questions that they ask and in the analysis of their data (Rubin & Rubin, 1995). It is therefore impossible to be completely neutral as a researcher, as the researcher and their research cannot be separated in a meaningful way (Taylor, 2001). As research is intended to be a contribution to the ongoing formation of knowledge, it is important that the researcher continually reflect on how they "nurture" their "own individuality" within that work (Richardson, 2000: 925 cited in Ashcroft, 2006). Recognising the positionality of the researcher, and appreciating that interviews for qualitative research are about the coproduction of knowledge between the researcher and the participant, therefore, helps in making the research as honest and insightful as possible. In line with this argument, the next section will discuss the concept of reflexivity and its role in this research.

5.3 Situating the Researcher in the Process: The Role of Reflexivity

Reflexivity is one of the pillars of 'critical' qualitative research (Fontana 2004) and refers to the degree of influence that the researcher exerts, either intentionally or unintentionally, on the findings (Jootun *et al*., 2009). According to Primeau (2003) "Reflexivity enhances the quality of research through its ability to extend our understanding of how our positions and interests as researchers affect all stages of the research process" (cited in Jootun *et al*., 2009). Reflexivity is the continuous process of reflection by the researcher on his or her values, preconceptions, behaviour or presence and those of the participants, which can affect the interpretation of responses (Parahoo, 2006 cited in Jootun *et al.*, 2009). In this context, the researcher must recognise that they are in fact part of the social world being studied (Jootun *et al*., 2009).

Qualitative studies are prone to a degree of subjectivity because interpretation of the participants' behaviour and collected data is influenced by the values, beliefs, experience and interest of the researcher (Jootun et al., 2009). Qualitative researchers believe that there are many socially negotiated meanings of reality, making it difficult to apply positivist standards (primarily associated with quantitative research) of reliability and validity (Wetherell & Maybin 1996; Burns, 2000 cited in Jootun et al., 1009). But if multiple interpretations of the same reality are possible, then there is a case for embracing subjectivity in qualitative research rather than dismissing it as a weakness that dilutes its trustworthiness. Awareness of the reciprocal influence of participants and researcher on the process and outcome makes the process more open and transparent and is a vital part of ensuring rigour in qualitative research.

It is therefore important to consider the role that the researcher plays within the research design and, more significantly, in the way that particular role impacts upon the relationship the researcher establishes with the participants (Blaikie, 2000). According to Taylor (2001) the researcher must able to step back and be self-aware, recognising their role within a particular context. The rapport that a researcher is able to establish with their participants may be determined by the biases, anxieties, fears, expectations or excitement that the researcher brings to the topic, and by researcher preconceptions about the experiences the participants may have in relation to that topic (Rubin & Rubin, 1995 cited in Jootun et al., 2009). The particular account of a participant, and the meanings that may be assigned to it, have been constructed within the context of an exchange involving two speakers, (the researcher and participant) and therefore must not be seen as representing the participant's true and only account of a particular experience but rather, as one of the many possible ways they may construct their account in that context (Silverman, 2000 cited in Ashcroft, 2006). Thus, not only will the interview transcripts be influenced by myself as a researcher and my interaction with the participant, but also by my subsequent analysis and the findings concluded from my results.

Therefore it is in the researcher's best interests to identify his or her thoughts, ideas, presumptions and personal biases from the very beginning of the research (Speziale and Carpenter, 2007 cited in Jootun et al., 2009). In explaining my research interests and introducing myself to the participants, therefore, I felt a need to tell them "my story" in relation to this study. This was especially important in this study because of my background as an employee at PricewaterhouseCoopers. I explained in the formal letter of invitation to the research participant that this research was being conducted for the completion of my Masters thesis at the University of Canterbury, and is entirely independent of my work with PricewaterhouseCoopers (which I discuss further in the Ethics section of this chapter). Nevertheless, my professional background has a significant influence on my understanding of the topic, and my perspective on business issues. Some organisations which participated in this research are either clients, or competitors of clients with PricewaterhouseCoopers, which may be of sensitivity to the participants. I reiterated this message at the beginning of each interview, and reminded the participants that they could choose not to participate at any time, and could advise me to remove any content from the transcripts after the interview. All participants were comfortable with these conditions.

Therefore, as part of locating myself within the research when introducing myself to participants, I provided brief autobiographical details, explained my own interests in the topic and described how those interests had evolved as a consequence of my experiences during my tertiary study at the University of Auckland and as an employee at PricewaterhouseCoopers. I told the participants at the outset of the interviews that I was born in the United States and moved to New Zealand in 2004 to study Environmental Science. I described how my research interest in climate change policy had emerged from my Postgraduate diploma in Environmental Management at Auckland University, which led to my work with the Climate Change and Sustainability Team and PricewaterhouseCoopers.

This approach was beneficial in two significant ways. Firstly, by providing my own autobiographical narrative in a relaxed and open way, I believe I was able to establish trust with the participants to an extent whereby they felt secure in relating their climate change perspectives to me openly. This created an environment within the context of the interviews and research whereby participants' discussions of climate change opinions, sometimes personal and confidential, were provided frankly and I was entrusted with their honesty.

Secondly, I was very much aware that no matter how 'neutral' I intended to be as a researcher, like the participants in this study I was constructed in particular ways by my own experiences and knowledge of climate change policy and politics. By taking a reflexive approach to the study, I believe that I made every effort that I possibly could to position myself so as to present an honest account of all the participants' stories by including their positive comments about the issue as well as those critical of it.

5.4 Situating the Researcher: Background and Interview Preparation

In preparation for each interview, it was necessary for me as the researcher to conduct a thorough investigation of the organisation's website, press releases, annual reports, submissions and other publicly available corporate documents. This phase of preliminary research was an important step in preparation for the interview and to ensure that the most appropriate questions were asked. During this research I developed an understanding of the background behind each organisation's position on climate change, which encouraged a personal level of empathy for the issues the organisation faced, and the reason for its position – prior to the interview. In fact, I noticed myself becoming more encouraging and empathetic to the interviewee's responses, than was necessary for objective analysis. In contrast to a more critical or probing interview strategy, the interviewee was never challenged or made to feel threatened in their ideas or their responses. Under this approach the interviewee may have felt more comfortable under this style, and may have divulged more information than other circumstances. This approach will have naturally influenced the content of the interview, the issues discussed, and the extent of information divulged.

It is also important to consider how my professional background may influence the findings from this study. As an employee at PricewaterhouseCoopers, a professional services firm, consulting with organisations in regard to sustainability and climate change issues, I have a particular style of engaging with 'corporate clients'. While the interviewees were not 'my clients,' my professional background and training has a significant influence on the way in which I engage with business professionals. This background influences also my views and value as a researcher and will influence the issues deemed significant for subsequent analysis. Acknowledging my reflexivity as a researcher, the findings of this study do not claim to be an 'absolute truth' of the organisations discussed, or the transcripts obtained. This study is a depiction of 'my story' as a researcher, in meeting with a diverse group of senior managers from a range of different organisations, and the results are suggestive of ways in which, and why, their responses corresponded with or differed from each other, and the literature.

5.5 Ethical Issues Pertaining to the Study

In this study I was investigating a topic which is highly polarised and political, raising a number of ethical issues that needed to be addressed. This research follows standard ethical safeguards, as described by Tolich and Davidson (1999). These include five core principles that a researcher undertaking a study such as this must address. Firstly, the researcher must not cause harm to the participants in any way. Secondly, all participation must be voluntary and participants should have a right to withdraw at any stage. Thirdly, participants must be able to consent to their involvement in the project from an informed position. Next, the researcher must not deceive the participants in any way. Finally, participant confidentiality and anonymity must be maintained at all times (Tolich &

Davidson, 1999). These principles were considered in the design of the study and throughout the research process.

The researcher is responsible for finding appropriate ways of providing information about the research to all potential participants, and for ensuring that any consent given is done so from a fully informed position (Alderson, 1995 cited in Ashcroft, 2006). Every participant in this study was provided with two information sheets (one containing a brief overview of the study and the other containing all the relevant detailed information about it) and a consent form so that their consent could be given from an informed position (see Appendix Section 3.6, 3.7). The purpose of this material was to provide the participants with clear and concise information about the aim of the study, the reasons for selecting them and the level of commitment that was required. It also ensured that they were fully informed of their rights as participants of the study as well as my obligations in respect of those rights. Participation in this study was entirely voluntary and the participants were given the right to withdraw at any stage.

By using Tolich and Davidson's (1999) five principles of ethical conduct, I designed a study that would be considerate of the participants' ethical concerns. I also provided as much detailed information as I could to try and ensure the participants understood what the study was about and what was required of them as part of that. Finally, I established the necessary strategies and protocols that would ideally protect them from any unforeseen harm.

As this study involved field interviews with human subjects, ethical clearance from the University of Canterbury's Human Ethics Committee was required. Important considerations included informed participant consent, voluntary participation, rights to withdraw from the study at any time, data confidentiality and protection. A Low Risk Ethics Application Form was signed by the Department of Geography HOD and submitted to the Ethics Committee but was initially rejected. The Committee were concerned about the independence of my research with potential clients of my current employer, PricewaterhouseCoopers (PwC). To address these points, The Ethics Committee requested that I complete a High Risk Research Application and that I provide a detailed account of this matter in my Research Participant Consent Form. I also consulted with my employer at PwC who was initially concerned over the independence of the research and my engagement with some of their clients as a research student. To address these concerns, I noted my status as an employee of PwC in the consent form and that I would not disclose any confidential details of my research with my employer. Upon addressing this matter in the Consent Form, PwC agreed to these conditions and my application to the Ethics Committee was accepted. This consent form was sent to all potential research participants during the initial invitation to participate, and all participants agreed to these conditions prior to the interview.

5.6 Sample Selection

A sample of organisations was selected based on their anticipated interest and influence in New Zealand climate policy and which are considered 'Points of Obligation' under the New Zealand Emissions Trading Scheme (NZ ETS), as they will have a legal obligation to purchase emissions units (which are involved in the trading aspect of the scheme) for any greenhouse gas emissions (those directly associated with their operations or those associated with their products) exceeding a certain intensity threshold. This will impose a significant financial liability on these organisations, which makes their response to the development of this legislation particularly interesting. The five primary sectors included in this legislation as Points of Obligation (with the number of organisations in each sector in brackets) include: forestry [>1000], liquid fossil fuels [5], stationary energy [45], industrial processes [35] and agriculture [25]. To identify organisations and individuals who had opinions on the ETS legislation, organisations were selected which made submissions on the Emissions Trading Scheme parliamentary review in 2009 (available to the public on the Parliamentary website http://www.parliament.nz/). These submissions were used as a tool to determine which organisations had opinions on the NZ ETS, and for identifying the individuals within the organisation who wrote the submission and may be potential interviewees. In most cases, emails for requesting research participation were sent to this person, while in other cases, emails were sent to individuals recommended from personal contacts. See Appendix Section 3.2 to 3.4 for details on the organisations invited to participate in this study.

The sample for participant selection included the organisations which are Points of Obligation under the NZ ETS. Except for forestry, the other Points of Obligation are among the heaviest emitters and biggest contributors to New Zealand's total greenhouse gas emissions. Businesses in these industries, by nature of their operations – manufacturing or distribution – consume, and rely on, a large amount of fossil fuels and emit greenhouse gas accordingly. The forestry industry, in contrast, provides carbon sinks and thus helps mitigate climate change. Foresters are included in the NZ ETS to provide incentives for afforestation and discourage de-forestation, with forest owners liable to pay for the emissions released from harvesting. However, the forestry industry also relies on fossil fuels and stationary energy in its operations, and will therefore also be negatively affected by the increased operational costs imposed by the NZ ETS.

A total of 44 organisations were contacted. After the initial email invitation was sent, there was a 41% response rate. There were 18 non-respondents and 4 organisations which responded declining to participate. The reason for non-participation was cited as 'too busy', 'not recommended by legal advisor', or 'as everything we say is often used against us', 'our policy is to say as little as possible'. While 27 organisations responded to my invitation, there were many cases in which my query was forwarded onto another person in the organisation, who then failed to respond. While these instances were followed up with subsequent emails, 'out of office' replies may have been common causes of non-response and subsequent 'loss' of the participant. While 22 organisations agreed to participate, the final 17 organisations selected in the study was a result of timing, availability and accessibility for interview. See Table 1 for details of the organisations which participated in this research.

Organisation	Industry	Structure/Ownership
Meat and Wool NZ	Agriculture	Industry Association Owned, Funded by Levies
Landcorp	Agriculture	SOE
Ravensdown	Agriculture	NZ Private Company
Ernslaw One	Forestry	Subsidiary of an MNC
Norske Skog *#	Forestry	Subsidiary of an MNC
Fletcher Building *	Industrial Processes	NZ Publicly Listed Company
Holcim *	Industrial Processes	Subsidiary of an MNC
New Zealand Steel * #	Industrial Processes	Subsidiary of an MNC, Publicly Listed in Australia
Methanex * #	Industrial Processes	Subsidiary of an MNC
Chevron	Liquid Fossil Fuels	Subsidiary of an MNC
BP	Liquid Fossil Fuels	Subsidiary of an MNC
Gull	Liquid Fossil Fuels	Subsidiary of an MNC, Publicly Listed in Australia
New Zealand Refining Company *	Liquid Fossil Fuels	NZ Publicly Listed Company
Genesis	Stationary Energy	SOE
Contact Energy	Stationary Energy	NZ Publicly Listed Company
Mighty River Power	Stationary Energy	SOE
Greenhouse Policy Coalition * #	Cross-Industry Group	Industry Interest Group

Table 1 provides the details of the organisations interviewed, their industry sector, and organisational structure. * Refers to organisations which are Emissions Intensive Trade Exposed (EITE), and # refers to organisations which were members of the Greenhouse Policy Coalition (GPC) at the time of interview with the research participant.

5.7 Meeting the Participants

I began recruiting participants for this study on July 7th 2009 and met with my 17th and final participant on December 4th 2009. Although the recruitment of 17 participants advantageously provided a balance between the five primary points of obligation under the ETS (Agriculture, Forestry, Liquid Fossil Fuels, Stationary Energy and Industrial Processes) as well as a diversity and depth of experiences and employment within those groupings, I had not predetermined that number. This was a result of the availability and accessibility of the participants for arranging an interview with the researcher.

In any research study, participants should have an obvious connection or relationship to the subject area of research, be knowledgeable about it or have experiences of it, and collectively represent a balance in the diversity of viewpoints and perspectives concerning it (Rubin and Rubin, 1995). The participants sought for this study were senior managers who are involved in their organisation's climate change response. In order to fully discuss the issues of interest to this study, the participants needed to have an understanding of New Zealand's climate change policy and how this impacts their organisation. Therefore, the interviewee was targeted based on the organisation's public documents (submission to the Emissions Trading Review Committee on the Parliamentary website) or contact persons identified on the corporate social responsibility or environmental affairs sections of the company website or annual/sustainability reports. In other circumstances, the interviewee was targeted based on contacts in the industry who knew relevant employees in the organisation (otherwise known as the snowball effect). An initial invitation to participate in the research project was sent by email to the anticipated interviewee of each organisation.

5.8 Interview Strategy

In contrast with other methodologies, qualitative research allows for the possibility of multiple rather than singular ways of understanding a certain issue. According to Richardson (2000), the particular skills and aptitudes that a researcher brings to a project, in their engagement with participants, analysis of data and processes of writing, are important components which distinguish qualitative research. It is not the study questions or the taped interviews, but the researcher that becomes the "instrument" through which the most meaningful data will be uncovered and the best analysis will be done (Richardson, 2000: 925). This approach generates a more fluid and evolving relationship with the topic whereby new ways of understanding continually emerge (Richardson, 2000). However, while the researcher may be the 'instrument' through which the most meaningful research can be done (according to Richardson, 2000), the participant must always remain central to the project and the interview is the "construction site of knowledge" where the knowledge for this research is created (Kvale, 1995: 2). Undertaking a qualitative approach to this study involved thinking about how I could construct and conduct a series of interviews with a group of senior managers about a topic that was emerging as a contestable political issue and is anticipated to have a significant impact on their organisations.

The purpose of the interview in qualitative research is to gain an insight into the way that a research participant comes to understand the world around them in relation to the particular context or experience being studied. It is more profound than other types of interviews or general conversations, but extends beyond the "surface talk" of everyday life to create a "rich discussion of thoughts and feelings" (Maykut & Morehouse, 1994: 80). Therefore, the structure of the interviews was an important consideration during my preparation. Firstly, as I was lacking in interviewing experience, it may have been advantageous to adopt a highly structured approach to ensure the interview stayed on track. However, when participants have a broad and in-depth of knowledge of the phenomenon being studied, it may be more beneficial to assume a less structured and more informal interview approach that allows participants greater opportunities and freedoms to impart their knowledge (Ashcroft, 2006). Nevertheless, I was aware that I would only gain useful data if, prior to the interview, I designed useful questions (Tolich & Davidson, 1999), which allows the opportunity for participants to use their own words to describe their experiences and define the meanings they attribute to them. According to Maykut and Morehouse (1994), these questions should be broad, open-ended and serve to encourage participants to engage in a conversation on the topic or context being studied (cited in Aschcroft, 2006). In the end, an informal, semi-structured approach was deemed to be the most appropriate style to interview my research participants. This was because I was most interested in the issues which were important to the interviewees. I did not want the interview to be completely guided by my preconceptions, and I wanted to give the participant the opportunity to 'tell their story.' Therefore, a semi-structured interview questionnaire was created to guide the interview content, but each interview developed in its own way, and the interviewee covered the questionnaire content at different stages of the interview. For further details on the interview process, see Appendix Section 3.1.

All 17 interviews were transcribed and then emailed back to the participants for clarification and approval – as agreed on the ethical consent form. Although several participants identified topics they would prefer to remain confidential, or made personal comments they did not feel were representative of the organisation, for the most part all the participants consented with the transcribed material to be used in this thesis. Two participants did ask for me to keep certain aspects of their investments plan and strategies confidential, as they were 'projects in the pipeline' which had not been finalised and had not been publicly announced yet. Only a few participants made minor changes to their transcripts. These were often minor clarifications such as those where a particular emphasis given in the oral interview did not translate effectively in written form, or there were grammatical errors.. Other participants made candid comments about other organisations, industry associations, or politicians which they mentioned so as to provide me with a general understanding of the issue, but preferred that their personal opinions remain confidential. As a result, these sensitive materials were excluded from the data and the extracts published in this thesis.

5.9 Locating Themes and Meanings

As the interview phase of my research transpired over several months, it was helpful to make notes and begin a tentative preliminary analysis immediately following each interview. This process began by identifying the dominant themes, narratives and storylines which were appearing in the interviews. While it is important to emphasise that this early analysis, undertaken as the data were being collected, would only produce rudimentary outcomes in terms of the wider aims and objectives of a study of this nature, it does aid the researcher by providing a starting place for further analysis (Ashcroft, 2006). During the preliminary analysis I identified four dominant themes that were significant in differentiating the narratives presented by the research participants, including:

1 Different perspectives on the risks and opportunities of climate change based on industry and exposure
2 Different perspectives on appropriate climate change policies and the ETS
3 Different perspectives on social and environmental responsibility for climate change
4 How these perspectives diverged in relation to the job position and designated responsibilities of the research participant within their organisation

Following the preliminary stages of analysis, the subsequent findings were extrapolated and analysed in the context of the theoretical framework established. This resulted in the categorising of the predominant narratives into three primary motives – competitiveness, legitimacy, and social responsibility - as determined in the Bansal and Roth (2000) model of Corporate Ecological Responsiveness. While this phase was only a preliminary process, it helped in reminding me of the aim and intent of my research, and made me aware of notable comments and issues during subsequent interviews.

The process of analysis and interpretation in identifying the key themes and storylines was two fold. The first stage involved a detailed reading of each interview transcript. Firstly, I focused on identifying the key themes which emerged from each interview, trying to discern the 'story' which emerged from each interview, the key issues of concern to the participants, how they responded to questions, and what issues were included and omitted. To do this, I spent several hours working on each transcript, highlighting and making notes in the margins.' Each transcript (between 22 and 64 pages) was then reduced to a 2 page synopsis of what happened in the interview, the story as constructed by the respondent, and the key themes which emerged. By writing a brief synopsis of each interview, I reduced several hundred pages of transcripts down to 34 pages of key themes and storylines and categorised the themes overall according to the motivating logics of the Bansal and Roth model.

In the second phase of analysis, I went back to the transcripts and extracted quotes which matched the key themes constructed in the semi-structured interview questionnaire. As each interview was semi-structured, the content did not follow the order of the questionnaire, and in some instances, particular questions were omitted or not answered by the participant, even after the question was asked. As a result, it is not possible to categorise, or 'map' the answers that were provided to each question. Therefore, I chose to identify the key themes which were common throughout the interview transcripts, and extract quotes of interest for discussing these themes in the research findings.

The next phase involved an overall reflection on the key themes which emerged across all the interviews conducted, and in relation to the primary research questions. The transcripts were scrutinised for statements about the risks and opportunities identified by the organisation, the managerial or organisational perceptions of the issue and their responsibility towards the problem/solution, and the primary factors which influence their decisions including the drivers and barriers to their activities.

An industry sector trend was taken to be where a majority of respondents within an industry presented similar, or significantly overlapping, perceptions about a particular topic. The interview content was then scrutinised for overall trends across the different industry sectors and organisational structures.

As I read through the transcripts, I noted comments that supported or conflicted with anticipated patterns (based on the Bansal and Roth model introduced in the theoretical framework in Chapter Two) or suggested new ones. I excerpted these, and then reread the transcripts to be sure that I had identified all relevant instances. All comments were coded into theoretically relevant categories (e.g., drivers and barriers, risks and opportunities, proactive or reactive), which were then refined into subcategories. I read through each transcript at least four times checking for internal consistency and exhaustiveness. I also represented the data in charts, distinguishing interviewees by company, function, and industry, in order to better understand variation. This process allowed for a straightforward comparison of the similarities and differences in the data (See Flow Chart below, Figure 6).

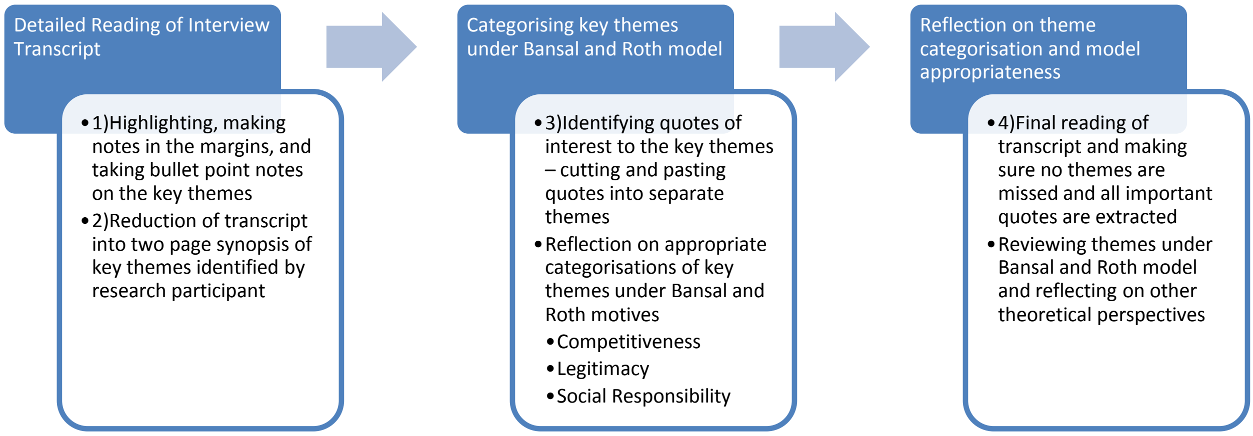

Figure 6: Flow Chart depicting the key steps in identifying key themes and quotations from interview transcripts in relation to Bansal and Roth model identified in theoretical framework

Then, using a physical cut and paste approach, I created word documents under the headings of the key themes and began moving sections of transcripts into relevant theme categories. Sometimes I found that a piece of narrative could occupy more than one theme and therefore I copied it into various themes with accompanying notes to identify the characteristics I had identified in assigning it to each particular theme. However, this made subsequent analysis difficult, as some quotes seemed to demonstrate multiple motives and represented examples of more than one theme. In such cases, these examples were scrutinised more thoroughly and these instances were explained in the results.

I replicated this procedure and applied it across all interview transcripts so as to identify any inconsistencies in the main themes, and to help identify any new emerging themes. However, while the themes did not change significantly throughout this process, I began to realise that by viewing and exploring the narratives over and over, I could potentially reshape the meanings of stories simply by the way I chose to categorise them (Ashcroft, 2006). To address this I took a reflexive approach and revisited those main themes to ensure that they had indeed emerged out of the participants' stories and not out of my need to categorise data. Having concluded that the main themes had indeed emerged out of their stories, I turned my focus to the narratives assigned in each of the theme categories for a final in-depth theoretical analysis using the methodological approach described in Chapter Four of this thesis.

5.10 Chapter Summary and Conclusion

This chapter has provided an account of how this study was conducted by explaining its overall qualitative approach from data collection to analysis. This has included a description of the ethical procedures, the recruitment and inclusion of the participants, and the design and conduct of the interview process. In particular, this chapter has highlighted the importance of reflecting on my role as a researcher - including my values, preconceptions, behaviour or presence, and those of the participants – and how those will affect all stages of the research process. Multiple interpretations of the same reality are possible in qualitative research., and so awareness of the reciprocal influence of participants and researcher on the process and outcome of research makes the process more open and transparent and is a vital part of ensuring rigour. The chapter has also described the techniques of data management and analysis that were undertaken as part of this study as well as the process of analysis that was used to make sense of the participants' stories. This process allowed me to categorise the main themes in relation to the motives identified as the theoretical foundation utilised for subsequent narrative analysis. The results will now be presented in Chapter 6 and then discussed in Chapter Seven.

Chapter Six: Key Themes Emerging from Organisational Responses to Climate Change – Results

6.1 Introduction

The aim of this study was to explore the range of organisational responses to climate change and why this is so. The study focused on three specific research questions: 1) what are the underlying drivers (risks and opportunities) which motivate and/or inhibit corporate action to address climate change; 2) what are the significant managerial perceptions and organisational variables that affect corporate responses to climate change; and 3) to what extent are corporate climate responses influenced by conventional business logic, institutional/organisational processes, and ethical responsibility/responses to public pressure? From the analysis of the narratives emerged a number of diverse themes which revealed how similarly or differently interviewees perceived the opportunities and barriers of climate change in relation to their own organisation's mission and actions, and the array of values and reasons given to rationalise those positions. The three motivating logics of competitiveness, legitimacy and social responsibility, as articulated by Bansal and Roth (2000) and presented in the theoretical framework in Chapter Two, proved a useful framework for differentiating the managerial narratives and exploring these research questions. Table 2 illustrates how these themes corresponded with the motivations described by Bansal and Roth, and the number of organisations by industry sector showing strong evidence for them.

Motivation	Key Themes (Exemplary Quotes)	Organisations showing strong evidence	Sector	Structure
Competitiveness (Market Driven)	1. Undermining International Competitiveness 2. Economics vs. Environment 3. Wait and See 4. Opportunity for Innovation and Differentiation	17 Organisations Total 3 Agriculture 2 Forestry 4 Industrial Processes 4 Liquid Fossil Fuels 3 Stationary Energy 1 Industry Assoc.	All	All
Legitimation (Compliance Driven)	1. In Defence of Big Business 2. Climate Change: Beyond Debate 3. Clean and Green: Do Consumers Care? 4. Maintaining a License to Operate	15 Organisations Total 2 Agriculture 1 Forestry 4 Industrial Processes 4 Liquid Fossil Fuels 3 Stationary Energy 1 Industry Assoc.	All	All
Social Responsibility (Value Driven)	1. Whose Responsibility? 2. Designated Responsibility and Internal Conflicts 3. Climate Change is 'Inextricably Linked' with Corporate Values 4. Doing the Right Thing	11 Organisations Total 3 Agriculture 0 Forestry 4 Industrial Processes 2 Liquid Fossil Fuels 1 Stationary Energy 1 Industry Assoc.	All except Forestry	All

Table 2: Key themes (exemplary quotes) and organisations showing strong evidence for three primary motivations adapted from Bansal and Roth (2000).

These key themes will be discussed in the following sections to demonstrate how the narratives regarding corporate responses to climate change correspond with Bansal and Roth's motives.

6.2 Competitiveness

This section begins with a consideration of those themes which most closely demonstrate competitiveness logic. Although not strictly a continuum, some themes in this category reflected the perception of climate change as a barrier, others as an opportunity. Some reflected organisational cautiousness in the face of uncertainty over climate change legislation (specifically in relation to the proposed ETS) and its likely negative impact upon competitiveness, the difficulty of discerning "when to introduce new products" and the risk in "moving too early" when the market is not yet developed. Other themes signalled climate change as an opportunity, where organisations were keen to "be in front" and "be pioneers in innovation", "take advantage of opportunities", and "get ahead of their competitors." The following sections present these themes and how they exemplify competiveness logic.

6.2.1 Undermining International Competitiveness

The prevailing concern of the managers within the Emissions Intensive Trade Exposed (EITE) organisations was the likely negative impact on their organisations' competitiveness through the imposition of an emissions price on their operations. In particular, those which are Emissions Intensive Trade Exposed (EITE), where production leads to significant levels of emissions and they compete against goods produced in other countries that do not face similar emissions costs, will face having to close their New Zealand operations and move offshore to avoid extraneous costs.

Under this theme, responding managers believed that despite the emissions intensity of their operations, their organisations provided a product which was valued as an important asset to human comfort and economic development in New Zealand. As argued by the interviewee from NZRC (New Zealand Refining Company), if the organisation were forced to leave the country, "then we will have a green and pleasant land, but we won't have very much of an economy - it's going to change the quality of life that most people would like to enjoy." Similarly, the respondent from the Greenhouse Policy Coalition (GPC) explained that the EITE industries "see themselves as providing a social good which improves the quality of life of New Zealanders and around the globe, and that they are making a significant contribution to the New Zealand economy, and already operate at world's best practice. The goal should be to minimise impact, not transfer it to other countries." This view was echoed by the respondent from NZ Steel who stated that their products add "a lot of value to the New Zealand economy" and that if they were faced with a carbon charge they would probably be closing down "and that's not what the company wants to do and I'm pretty sure that's not what the country wants to happen as well".

It was also argued that this would be a worse outcome for the global climate. This is because New Zealand industries are, in their view, already world leading in efficiency and emissions embodied in their products and if their product were forced to be produced in countries with less environmentally friendly practices, it would result in an overall increase in global emissions (known as 'carbon leakage'). Theirs was an appeal for a "level playing field" so that they could remain internationally competitive. This theme echoed across many organisations which have a high intensity of emissions, and compete primarily in export markets (e.g. Holcim, Fletcher Building, Norske Skog, Greenhouse Policy Coalition).

6.2.2 Economics versus the Environment

It was evident during the discussions that many organisations were engaged in weighing the economic well-being of the organisation against the need to take environmental action. Some saw the outcome as a "win-lose," others as a "win-win" when the environmental case was re-written in economic terms.

Some characterised environmental activities as desirable and economic activities as priorities. Such organisations "care about their reputations… are already addressing consumer issues, and have already cut a lot of low hanging fruit" (by enacting energy efficiencies). "They care about all those things. And more than I think people give them credit for. But you know there is the 'must have' and then there is the 'nice to have'. And the 'must have' is — you have got to be profitable," as described by the representative from the Greenhouse Policy Coalition (GPC).

Some organisations saw climate change initiatives as a means of cost reduction, not primarily to address climate change. While recognising the benefits of energy efficiency and cost reduction, a respondent from the GPC was concerned that "win-wins are not always possible" as "it often fails when you start to test it properly."

In contrast, another respondent said his organisation was firmly committed to climate change initiatives and had strong corporate values on sustainability. However, corporate social responsibility rhetoric was not used to describe these activities. Instead, the organisation used the rhetoric of sustainable or "smart" business practice. He doubted that many organisations would justify their actions on "environmental" motives, and would focus instead on rational business logic.

For some organisations, climate change was seen unequivocally as a financial issue, with one respondent (Norske Skog) saying that the proposed climate change legislation was, "going to end up being a financial trading kind of problem for us." "We already had strong incentives to increase our efficiency and we have done it because we pay a lot of money for energy. Eighteen operations shut down in the United States last year because their costs are too high. So controlling our costs is the number one priority for us... and that is what will drive us the most in any decisions that we make. But after that I guess getting a competitive advantage in terms of carbon claims we see as being something that we might try to do."

Economic considerations were also deemed to be the primary driver of their activities by an interviewee from the industrial processes sector (Fletcher Building). As an energy intensive business, his organisation has always been driven to improve the efficiency of their operations and climate change regulation is just another motivation to improve efficiencies. However, financial limitations were always a constraint on the extent of efficiency improvements.

"The question for any business today is are you doing enough in the short term within the constraints and are you thinking long term and strategically around what sort of changes will be way beyond the time that you're retired. We've poked and prodded at a few technologies and then backed off them because it just doesn't seem to be going anywhere, yet in the big picture you would think that's probably something that we should have stayed with. I think we do some things but it's a challenge for a public company to report profitability every six months."

Similarly for a respondent from liquid fossil fuels (BP), their commitment to alternative energy investment is governed by the shareholder: "You are in business to give a return to your shareholder and work within the rules of the land. You have to respect the balance between leading edge and bleeding edge, so the transition to energy alternatives won't happen tomorrow."

In some cases where there is a lack of synergy between economic and environmental considerations, organisations developed two strategic stances (NZ Steel). "Well, the business bottom line… in the recession it's really driving what we are currently doing at the moment. But you want to look at it in a couple of years, there's no doubt about it, the corporation is committed to reducing our carbon footprint, and they've said that and they will still support that. We've been asked, even in these times, to look at what opportunities are there and develop plans so financially when the time comes right, that we can implement those plans."

These perspectives demonstrate the inherent conflict of short term financial priorities with long term investment planning and environmental considerations. A number of the interviewees expressed concern over the lack of available capital. Many were from capital intensive industries so seriously affected by the economic downturn that they were unable to plan for long term investments, even where long term actions and investments are in the nature of the industry (e.g. forestry and stationary energy).

For example, although the forestry industry is an inherently long term investment business, one respondent (Ernslaw One) from that sector stated that investment in longer term climate change initiatives was not currently justified, as there is "no sense in having a long term prospect if you are dead in the short term." In other cases there was strong competition among the units for available capital for investments and it was often the carbon-related investment projects that struggled to get signed off.

In the case of an organisation from the industrial processes sector where they have limited capacity to reduce emissions associated with the chemical process of steel making, they do have energy efficiency projects in the pipeline. However there is “very strong competition for capital” across the business units, and they have yet to find an emission reduction project with a payback of less than two years. As a result, any further efficiency projects have been delayed.

These examples demonstrate the inherent difficulty in making investments towards environmental initiatives while satisfying economic priorities. As described by the respondent from Chevron, “You can measure the level of an organisation’s commitment in terms of how much profit it is prepared to forego. The company’s done some really massive, multibillion dollar venting and flaring projects and carbon sequestration projects and it’s just incorporated them into its day-to-day business.” As portrayed here, an organisations response to climate change is well reflected in how they prioritise financial and environmental concerns, and the extent to which they are prepared to make financial commitments towards initiatives for emission reduction.

6.2.3 Wait and See

Another theme to emerge from the interviews was the tendency for some organisations to adopt a “wait and see” attitude towards climate change action. There were a number of factors influencing this strategic stance.

First, some organisations had tried to take advantage of new market opportunities by launching new initiatives (such as a bio energy business proposed by Ernslaw One), but they “tried too early” and the initiative failed because the market was not ready due to a lack of consumer demand or interest. In such cases, proactive organisational initiatives can be hindered by lack of consumer demand for environmental products and services.

A second related factor behind the wait and see stance was political uncertainty. For Enslaw One, climate change is “just another risk” that the organisation is used to undertaking. However, due to political uncertainty over the legislation, there was a considerable risk in introducing products before there was sufficient market demand. Political uncertainty was not only a factor behind their own indecision on future steps but it was also blamed for failing to inspire consumer demand for environmentally friendly products and solutions.

An organisation in the agriculture sector (Ravensdown) has also attempted to introduce products to help tackle climate change in the farming community (Eco-N, a nitrogen inhibiting, more environmentally friendly fertiliser), but has struggled from lack of market demand which was also attributed to political uncertainty as well as lack of evidence of climate change impact. "The business case for Eco-N isn't for environmental benefit, but on grass production. These products need to have multiple benefits for market success since the policy is uncertain and the threats of climate change are not yet visible or tangible to farmers yet. Therefore, these products must have alternative benefits and promote profitable sustainable farms.

The interviewee explained that while they have often been the early mover, the organisation has suffered because the market isn't at the right place: "political noise might be but that's a long way from where the market actually is." Because they have trialled products that have not been successful due to lack of market demand, they are now employing a "stand back, wait and see" approach, and will "probably be a little more cautious". "There are quite a few things we have got lined up. There is a product we are considering to introduce right now but it is probably ahead of its time because, if we put it into the market now, unless it grows more grass – because there is no nitrous oxide offset, it is probably the wrong timing. But we will have a lot more of those things ready to go." He could visualise a win-win situation for internal efficiency and external credibility, but as there is no demand for paying more for products "right now there is no business case" for more environmental solutions. He said that "feel good doesn't get you there" and it was "not as though farmers aren't thinking environmental consciously, but when the bank is potentially pulling the pin on someone, you tend not to chase every last native tree planting programme."

This last story not only demonstrates how political uncertainty and issue salience can encourage a wait and see approach, but also highlights the problem for producers when political forces are out of step with market forces. In such circumstances, these narratives exemplify more of an opportunistic/hesitant approach (as described by Kolk, 2000) where organisations make preparations for regulatory and market changes, but see no need to take risks by being a first mover. This lack of synergy between political and market forces can be seen as a barrier to more proactive climate responses.

Many of the narratives reflected organisational pressure for profitability which, for them, reduced the desirability of high risk strategies and encouraged a more cautionary approach to risk. This suggests a third factor at play behind the 'wait and see' approach which is the role of risk, in this case risk aversion.

6.2.4 An Opportunity for Innovation and Differentiation

While some interviewees were weary of the political uncertainty and wary of the risk, others were keen to "be in front" and "be pioneers of innovation", "take advantage of opportunities" and "get ahead of their competitors." For them, climate change was perceived as an opportunity for innovative thinking, differentiation from competitors and changing the strategic direction of the organisation.

A respondent from a publicly listed electricity generator (Contact Energy), considered that climate change action is a required response and also an opportunity, "it's something we've known you just have to live with and work with and there are also opportunities there."

So too for a respondent from the stationary energy sector (Genesis Energy): "Climate change enabled us to shift our strategic direction as a company away from a mentality of risk." It was seen as an opportunity to influence customers, demonstrate corporate values, and innovate services – when the strategy was developed in 2005 in response to carbon tax, it "made us more innovative in our thinking in terms of what opportunities we can bring to the table.... so what was the risk and the threat of climate change policy has ended up creating innovation and a great sustainability programme for the organisation". This sentiment was reiterated by the respondent from BP, "This is a hundred year plus journey. As the debate moves forward, what are going to be the challenges and hurdles, and what are the rocks that are going to be thrown– so it is about getting your own judgment on those and just bringing it back to risks and opportunities. Risks and opportunities are often two sides of the same coin."

One interviewee from the fossil fuel sector (Gull) mentioned that the organisation's structure as a family-owned business was an opportunity for innovation and differentiation from the large oil multinationals which they compete with. "If we could provide a cleaner, less carbon intensive energy source of vehicles then that's what we're after as a business".

"We're going well beyond our compliance obligations as a company to say, 'Yeah, they're a business opportunity.' So that's unusual, to see a company that's got a liability, turn it into an actual business opportunity…. We've got a real focus on sustainability as a business and almost by default, because of our investment in biofuels and because of our biodiesel manufacturing plant, that's always been a point of differentiation for us as a business. We're a small family run business compared with the oil majors…and we certainly know we've got the liabilities, it's how you actually deal with those and if it was just about a legislative thing the business wouldn't pay too much attention to it, but now that they recognise there's an opportunity it's something we definitely want to have another good hard look at it to see if there is real opportunity here."

The interviewee explained that as a point of differentiation from the multinational oil giants, "it's a great way to operate a business. Most oil companies would be saying, 'no, no let's make it easier', whereas we're actually saying, 'no, we need to get onto this climate change… it's at the core of our business.' "

A strong factor contributing to the high level of acceptable risk is the organisational mindset and the degree of discretionary slack available to the manager. When asked about risk management, an interviewee from the agricultural sector (Landcorp) said his organisation tries to look for opportunities in risk and take a glass half full perspective; "I guess in my mind I look at any risk and see well, intuitively is there opportunity in it? Because anything you look at you have got to weigh up whether there are opportunities in it, even if it is a stinky piece of legislation. If we are going to be stuck with this what can we do with it and what advantages can we get out of it, and if we are not going to be stuck with it how do we move it on, but I think I always start from the perspective of what potential benefits could be there."

An important factor contributing to this mindset was the discretionary slack available for the manager to be creative, "Some of that comes down to an organisational mindset, I suppose. Because I work in strategy and I am not constrained – from the company's perspective they don't really want me constrained, I suppose. So if I can see a win/win somewhere that is fine. What they'll be, god only knows, but I would never rule out they won't be there."

This innovative and opportunistic perspective was reiterated by one respondent from the New Zealand Refining Company, "Business leaders need to have the vision and the courage to actually go for these things… The world isn't certain – the world is risky, the world is full of opportunities – go out and get them, don't wait for the handout. We're going out and grasping the future and we're going to make it real for ourselves, we're going to make it real for our people, we're going to make it real for our customers, and we're going to make it real for our stakeholders too."

An organisation is also more likely to undertake innovation and differentiation if there is a change agent within the organisation who drives this effort. An example emerged from the narrative with an interviewee from the forestry industry (Ernslaw One). "Our company's strategy is mine, yeah. And I have a lot of my co-managers looking at me, "Why the hell have you done that?" But that's alright, I've got to convince them it was the right way…. They don't share my vision that I should be turning that pulp mill and their saw mills into bio energy plants yet. This is a complete change in business for them."

These examples demonstrate how both organisational mindset and managerial behaviours play important roles in the drive to innovate and differentiate, and how competitiveness logic is a significant influence on organisational climate change responses.

6.3 Legitimation

This section continues with a consideration of those themes revealing legitimation logic. Using the definition provided by Suchman (1995), these themes reflect the desire of organisations to improve the appropriateness of their actions within an established set of regulations, norms, values or beliefs in order to gain legitimacy. These narratives also reveal the conflict created by tensions between legislative pressures, stakeholder pressures and technological resources as businesses struggle to maintain legitimacy.

6.3.1 In Defence of "Big Business"

Many of the interviewees devoted some part of their discussion to explaining the limitations of the Emissions Trading legislation and their own personal and organisations' reaction to it. While some of their criticisms focused mainly on its likely impact on competitiveness, which has already been considered in the section concerning competitiveness logic, others used the interview more generally as an opportunity to legitimise their reactions and those of their organisation. Aware that business was often cast in a negative light in the climate change debate, the narratives associated with this theme reveal the variety of pressures, sometimes contradictory, that influence organisations to take what they perceive as appropriate action.

Many managers (primarily from the EITE's and agriculture) felt the Emissions Trading Scheme (ETS) was an inappropriate mechanism for achieving emissions reductions, that the policy was not "sending the right signals" or providing the right incentives for behavioural change. In the case that the ETS remained, they felt their organisations, by virtue of the fact that have already reduced their emissions as far as they can prior to the ETS legislation, should be exempt from the ETS or be fully compensated with free allocations.

Many of the EITE said that compliance tools like the ETS would be less effective than voluntary approaches such as the Negotiated Greenhouse Agreements (NGA)[3], arguing that the NGA

[3] The Negotiated Greenhouse Agreements (NGA) refers to a previous New Zealand Government climate change initiative. The planned introduction of a New Zealand carbon tax - set at $15 per tonne CO2emitted - meant that energy intensive businesses (such as Holcim, Fletcher Building, Methanex, NZ Refining Company, Norske Skog, and members of the Greenhouse Policy Coalition) were at a serious disadvantage relative to competitors in countries with less stringent climate change policies. Recognising that this could mean the loss of a significant portion of New Zealand's major industrial capacity (a risk known as 'carbon leakage'), the Government introduced NGAs as a mechanism to encourage major industry to invest in achieving world's best practice in greenhouse gas emissions management. In return for business making necessary investments in emissions reduction, and achieving world's best practice operational standards, Government agreed to provide eligible (competitiveness at risk) firms with full or partial relief from that carbon tax in return for moving toward world's

"encourages New Zealand industrial excellence, encourages New Zealand industrial growth, and encourages New Zealand to produce even more environmentally friendly products."

Respondents, particularly in the fossil fuel industry, expressed feelings of powerlessness to influence policy or have their voices heard, despite the relative smallness of New Zealand. According to the interviewee from Chevron: "The mandate was forcing us in completely the wrong direction for New Zealand consumers and yet we would have had to be compliant with it. There was no amount of argument that we could give the government that they were prepared to listen to. All of what we saw as practical and pragmatic consumer issues they saw as oil company resistance to climate change movements and there was no amount of argument that we could give them that would work better… It's very fashionable at the moment for business to be the bad guy."

This respondent described how government had dismissed arguments by business as corporate "excuse making" and ignored them. This was a source of frustration for the respondent who believed that their organisation's position was best for the environment, but that politicians and environmentalists did not want to hear it as they always look to blame big business for environmental problems.

A sense of unfairness pervaded this theme, "In Defence of Big Business," in light of the steps that many organisations felt they had already taken to reduce their emissions and that there was little that they could do to mitigate emissions further or reduce their liability to climate change legislation. Some of the organisations interviewed had engaged with the Government in the voluntary NGA process, yet they were not going to benefit from the emissions reductions they had already made. This was a particularly sensitive issue for industries in which GHG emissions are a 'natural part' of their operations such as in the agriculture industry and those involved in the production of cement and steel.

Having already made significant emissions reductions over the years, the steel industry has limited capacity to further reduce emissions which are inherent in the production of their products. According to the interviewee from NZ Steel, "we can't change the chemical process. If we want to make steel we're going to produce CO2. And 80 to 90 percent of the CO2 we produce is due purely to the chemical process of taking iron ore and converting it to steel and there is little we can do in terms of

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best practice in greenhouse gas emissions management (e.g. a business reduces its greenhouse gas emissions to an agreed target level that is technically and economically feasible). While the Government decided not to proceed with the carbon tax/NGA regime in December 2005, these organisations had already made significant investments and improvements in reducing in their greenhouse gas emissions. (http://www.mfe.govt.nz/issues/climate/policies-initiatives/history/nga.html).

reducing the amount of carbon that we use to make steel. There is no steel industry in the world that has got any carbon tax imposed upon them at this moment, they all have been exempt or got free credits."

This concern was echoed by a representative from the industrial processes sector (Fletcher Building): "For a company like us, in the short term the options available to us are rather limited in terms of emission reductions… from a technology change point of view, that's a change that's going to take decades…. For companies like ours there has to be patience with what we're doing because we can't make cement carbon neutral, and in the short term there's just no way."

Similarly, a representative from Methanex (industrial processes) reported that although they have already reaped economic benefits through reducing their emissions and improving efficiencies, they are still emissions intensive "and you cannot change that in an instant." They have already "picked off that low hanging fruit" and "there is not much more we can really change. We are what we are. Our process claiming methanol from natural gas is actually a relatively clean process, still emissions intensive compared to some other chemical companies, but we have to be mindful of that. The world relies on products like methanol so it is finding that balance in providing product that makes all the things that we like in our day to day lives, you know the comforts of our homes. So many of those products actually are derived from methanol."

In common with other businesses that provide products considered necessary to quality of life, this organisation faces the conflicting tensions of legislative pressure and market forces in determining the appropriate actions to take.

The agriculture industry too faces significant challenges as there is no current mitigation technology to encourage emissions reductions and so they have limited ability to respond to the legislation. According to a respondent from this sector (Landcorp), "We are concerned it is putting a significant imposition on the industry without any way of mitigating, it would be just a straight tax. So all you end up doing is moving our production to somewhere there wasn't an ETS, which makes no sense to us." In this case, the business is faced with the opposing forces of legislative pressure and organisational expectations to maintain viability which may force them to move operations offshore.

These narratives demonstrate how climate change presents a threat to organisational legitimacy and the various arguments put forward to defend their position on controversial climate change policy.

6.3.2 Climate Change: Beyond Debate

Another theme that emerged was the view that climate change was beyond discussion as a matter for debate and something that business simply needed to accept and address: it was "just another cost to the business" and "we are required to engage in this and must "put up or shut up."

As a respondent from the agricultural sector explained, "I think it's really dawned on them that this is a large issue for the sector and they're not quite sure still how they might address that going forward and the resources that might be required…but at the end of the day the subject is too important for them to ignore."

This opinion was also commonly voiced amongst the fossil fuel providers, that their interests lie in providing energy for a growing population demand and that debates about whether climate change was occurring are a diversionary 'waste of time'. For one respondent from this sector (BP), "We don't get into the debate about the science. I am not going to waste my time getting into that type of conversation simply because whether it is right or wrong to me is indifferent…there is sufficient momentum behind this now and we need to address it. Beyond whether it is impacting the climate, the fact is, one fifth of the world's population is using most of the energy and that means that all streams and sources of alternative energy are going to be required if the rest of the world's population is going to come up to the same level."

Uncertainty added an additional layer of complexity with respondents concerned that climate change "will remain a political football" for years to come and there would be "no certainty on international negotiations or carbon prices." This has indeed come to pass since these interviews took place, given the lack of resolution on internationally agreed responsibilities at the Copenhagen climate change conference at the end of 2009. Many of the respondents do not yet know the extent of liabilities they may face in the future and such uncertainty has prevented them from making investment decisions or long term economic assessments. This was a common concern in Forestry, Industrial Processes, and Stationary Energy.

A member of a multinational corporation in the industrial processes sector (Holcim) already facing stringent internal emission reduction targets wanted an end to this uncertainty. They have been waiting to develop a new efficient plant for many years, plans for which have been delayed by the political uncertainty of the ETS as well as delays in the resource consent process. This significant investment is riding on the outcome of the New Zealand climate change policy, and if the policy is too restrictive (i.e. the cost of the ETS is not offset with free allocations), they may be forced to abandon their New Zealand operations and instead invest in other operations overseas (most likely with world class efficiency, but without government imposed carbon costs). "For this particular issue, if this is the only way we can get some sort of progress on this issue, then for God's sake, let's go ahead and do it…. let's just get something going that is – preferably something that doesn't actually kill us."

In this case the need for certainty outweighed the potential for greater relative costs of the outcome. In contrast to other emissions intensive trade exposed (EITE) organisations, which were hoping for a delay in policy, or exemption from the scheme, this business fundamentally supports the ETS given their greater resistance to the uncertainty and the delay in investment planning it imposed.

Unwilling or unable to deal any further with political uncertainty, some organisations had decided to be proactive on climate change and develop their own strategic environmental responses in advance of legislation. In the words of another interviewee from liquid fossil fuels (Chevron), "Business hasn't been able to wait for governments to catch up on the climate change issues and so our organisation made its own decisions on climate change at the end of last century (1999). We set up an energy efficiency business, that's just good business and good conservation sense, and we've had a formal greenhouse gas reduction programme since 2001." These examples demonstrate how organisations have opted for more proactive approaches in response to political uncertainty and the need to maintain legitimacy.

6.3.3 Clean and Green - Do Consumers Care?

Another common theme associated with legitimation logic was the role of consumer pressure on an organisation's determination of appropriate action. It was clear from the narratives that consumer pressure to address climate change is dependent on the industry, their products and their relationship with consumers.

For some organisations and their products, there is low issue salience on the part of consumers. A member of the forestry sector (Ernslaw One) explained that while his organisation is promoting a domestic campaign on the environmental benefits of wood products to appeal to the environmental awareness of New Zealanders, they are aware that consumers from Asia are not as concerned about the environmental credentials of their products: "Clean green carbon neutrality means nothing in export commodity markets", "at the bulk commodity end of things whether it be milk powder, pulp or logs, nobody gives a toss in any overseas market. You're selling to third world countries, they haven't addressed the issue, there's no awareness."

This variance in consumer awareness was seen to be a function of industry sector. As explained by a representative from the Greenhouse Policy Coalition, "If you are producing aluminium or cement or steel the customers are not actually going to insist that it is green cement". It was explained that "organisations that have customer issues anyway are already managing those issues, but some organisations have customers in Asia who don't care about green credentials". As such, consumer awareness "depends on what industry you are in." Similarly, as the respondent from Ravensdown articulated, "I don't believe there are enough green buyers out there."

For other respondents issue salience was higher. As reported by one respondent in the agriculture sector (Landcorp), "There is certainly a reasonable amount of consumer pressure for anybody supplying products to actually be cognisant of their carbon footprint. So whatever we have to do we are going to have to be more efficient in the carbon sense. So then, it is how fast does the ETS force you to do things – force you into uneconomic territory in relation to meeting your customers' expectations? If there were no consumer requirement for, or no consumer concerns in this space then I would be thinking about that perhaps a bit differently. But given that I know that it's kind of a market concern….we need to be doing something in that space anyway."

These responses provide support for the notion that the presence of consumer pressure can play an important role in influencing organisational responses to climate change and varies by industry sector. In cases where there is high consumer salience, organisations recognise climate change as a reputational issue as well as a market opportunity.

6.3.4 Maintaining a License to Operate

A final theme associated with legitimation logic was that a responsible climate change position is important for maintaining a license to operate. This was commonly referred to by representatives amongst the multinational corporations, who advocated the importance of being "good corporate citizens" and "doing the right thing" which was a well engrained corporate value addressed in pre-existing policies on sustainability and corporate social responsibility.

For instance, the interviewee from a multinational corporation in the industrial processes sector (Holcim) expressed the view that it was "not sustainable to ignore the issue [climate change]," that "it must be done," as organisations in this industry "need a license to operate," and "we can't afford not to be doing this." With their international reputation under the close scrutiny of stakeholders, "it's not about being nice, it's survival."

Recalling the words of one interviewee (Chevron) on maintaining a license to operate, "we don't separate our fiscal responsibilities to our shareholders from our social responsibilities to all of our stakeholders; they're actually all important… it's important for us to maintain our social license to operate. And you don't get a social license to operate when you're belching black smoke into the sky. Never mind whether you should or not, whether you've decided ethically whether you should or not, pragmatically you wouldn't be permitted to operate in that way. But our position is not just we wouldn't be permitted to operate in that way but I'm given the direction from the chairman's office now that this is the right way for us to behave, that part of our values is protecting people in the environment. These are strong values for us as a company and we understand that what we do has a big impact on the environment and we have a responsibility to mitigate that impact when it's brought to our attention so we do."

From these comments, it is clear that this organisation feels an obligation to take responsible action towards climate change in order to maintain legitimacy in its institutional field, supporting the notion of a theoretical relationship between organisational legitimacy and organisational survival. This was a common theme amongst the multinational corporations and the emissions intensive industries, such as fossil fuels and industrial processes, which are often under greater scrutiny from stakeholders to take responsibility for their impact on the local environment. These examples demonstrate the influence of legitimacy on motivating corporate responses to climate change.

6.4 Social Responsibility

Beyond competitiveness and legitimacy, the third motivational logic for environmental action is social responsibility, which is driven by the social obligations and values of the organisation. According to Bansal and Roth, actions in this category are concerned with the moral imperative to act rather than to fulfil other goals, such as financial concerns or maintaining legitimacy. However, there were few examples given during the interviews of actions taken purely from a social responsibility motivation as many interviewees noted the corporate expectation and shareholder requirement that businesses must be profitable. Instead, many of the narratives collected in this study revealed mixed motives, where social responsibility was an important consideration in corporate action, but one which must be considered along with other pressing concerns. The following sections will discuss the context in which organisations felt climate change was an issue of social responsibility, and how these initiatives were valued relative to financial and institutional issues.

6.4.1 Whose Responsibility?

A common theme emerging from the interviews concerned whose responsibility it was to take climate change action. Many interviewees noted increasing consumer interest in environmentally friendly products but that, ironically, consumers were often unwilling to pay for environmentally friendly products or the increased costs of products as a result of climate change legislation. Many characterised this as a "problem of human nature" and the unwillingness of consumers to take personal responsibility for the problem when it undermined their convenience and comfort. Further, some interviewees argued that their organisations produced products or services that provided social or economic good which in the minds of their consumers outweighed the environmental 'costs' of the product.

For one interviewee from the fossil fuel sector (Chevron), it was questionable who was responsible for the 'emissions of the product,' as their emissions were not produced during the manufacture but through the consumers' 'consumption' of the product. For her, responsibility should therefore be 'shared' by industry, the consumers, and government. "We're not deliberately polluting the environment, and I question whether we are polluting the environment or whether automobile drivers are polluting the environment, but regardless whether fuel is polluting… if we can produce a mobility in ways that are profitable for us and that don't cause damage to the environment of course we would prefer to do them that way – it's not rocket science."

"Nobody wants to pay money to buy petrol, nobody wants the pollution in the environment, of course they don't. Similarly, nobody wants to walk to work. There's a cost to everything you do… So there is that conflict of what people want. As everybody says they want this to be a nicer place but everybody also wants us to move up the OECD rankings, the economic prosperity, so which is it, you don't actually get both, you've got to trade stuff off but we don't. As a society we don't; we want both. We want all of the economic benefits and we want the environment to be better, you don't get both, you've got to choose. Just different philosophies but in essence you don't get both, you go and do one or the other and no consumer, no voter wants to do one or the other."

In a similar vein, an interviewee from New Zealand Refining Company explained the difficulty of taking responsibility for their emissions when 5% is from the refinery and 95% is through consumer usage of the product. As a result, the respondent said the organisation was focusing on making more environmentally friendly products, investing in more efficient engines and improving fuel economy. Even though such initiatives encourage the reduction in fuel consumption and do not directly benefit a fuel refinery, the interviewee argued that these initiatives are a responsible way forward in New Zealand.

An interviewee from the agricultural sector (Meat and Wool) described how the "carbon footprint of free range eggs is actually higher than the carbon footprint of caged eggs", highlighting the contradictory behaviour of ethically concerned consumers when attempting to act in socially responsible ways. From a rational corporate perspective, ethical or environmentally friendlier products would only be cheaper and more readily available where there is "greater consumer demand" for them.

Other interviewees stated that their organisations were also operating in markets where there is low issue salience for consumers. Although one organisation in this category (Genesis Energy) has been proactive in communicating their climate change response, they recognise that their customers are not as concerned about the organisation's climate change response as they are about the price of electricity. "The key driver for our customers is the price of electricity, not how we respond to climate change."

However, for other organisations there was increasing consumer pressure to be cognisant of their carbon footprint. As one respondent (Landcorp) mentioned, "you can't ignore that you know," "we are going to have to be more efficient in the carbon sense". Although the interviewee from Landcorp noted that if there were no consumer concerns "in this space then I would be thinking about that perhaps a bit differently," nevertheless "we need to be doing something in that space anyway". In this context, organisations are recognising the need to respond to increasing consumer concerns (market pressure), but would otherwise be responding to different motives, probably in relation to regulation or financial pressures.

These examples demonstrate the difficulty in attributing responsibility for greenhouse gas emissions, particularly for products where the emissions occur with the consumer and the production of such products are driven by consumer demand. It was evident that many organisations are frustrated with mixed messages from consumers and governments, who tend to blame the business community, when they feel there is little they can do to mitigate the problem, and that the Government and consumers should also be taking responsibility.

6.4.2 Designated Responsibility and Internal Conflicts

Another associated theme concerned the experiences of the designated responsibility holder in their role with the organisation. While the creation of a designated responsibility within the organisation to deal with environmental issues could be seen as motivated by the need for legitimacy (and considered under the category of legimitation logic), the interviewees had assumed the role of their companies' social responsibility conscience and environmental change agent, functions mainly motivated by a sense of social responsibility. These managers expressed frustration that their position often placed them in conflict with other employees and business units within their organisations. Examples of internal conflicts of opinions at the organisational level were common across all industry sectors.

For example, an interviewee from the forestry sector (Ernslaw One) described how he held the sole responsibility for climate change within the organisation and was seen as the "company cynic" struggling to get others in the organisation to share his view, thus making it difficult to effect drastic changes in corporate operations. In particular he expressed an intention to make significant changes in the organisation's business strategy but was facing internal resistance.

"I have a lot of my co-managers looking at me, 'Why the hell have you done that?' I've got to convince them it was the right way. They don't share my vision that I should be turning that pulp mill and their saw mills into bio energy plants yet…. This is a complete change in business for them. It's a pretty easy change for us at the growing end of things… but it will change the nature of our conventional forestry business."

This narrative illustrates that, while climate change offers opportunities for some organisations to enter new markets and services, it is sometimes difficult to transform traditional business activities, change managerial mindsets and get the whole organisation on board. Potential change agents can find themselves in a conflicted position between internal and external stakeholders.

To deal with divergent perspectives and potential conflicts across organisations within the agricultural sector, decisions were often made at the highest level, by senior executives and the Board (Landcorp, Meat and Wool). To reconcile any differences, these organisations invested in knowledge dissemination projects with local farming communities to encourage greater understanding and agreement throughout the sector. Consolidated opinions across the sector were seen to be important in helping to unify the sector and provide clearer guidance to government on their position on climate change legislation. Therefore it was important to recognise differences and endeavour to resolve conflicts, but keep decision making at a higher level to avoid extensive debate and delay in organisational action.

6.4.3 Climate Change Inextricably Linked to Corporate Values

In several instances the issue of climate change response was described as something which was embedded with pre-existing corporate values (such as the Global Responsible Care ethic, Methanex) and environmental policies (NZRC, Genesis). The company's position on climate change was seen to be a 'natural fit' with those values (Methanex), "it is just what we do," "it is who we are," "It is just a part of our business, it is the nature of our industry.... our values are beyond compliance." For these organisations, a socially responsible approach to climate change was well aligned with their predetermined organisational mindset and values: "trying to be a good corporate citizen…it's the job of the whole company" and "openness" with stakeholders is a fundamental corporate value.

"I think just being attentive to the topic of climate change worldwide has been quite important to us for a number of years.... because, with the Responsible Care aspect, it is an engrained part of our culture globally to ensure that we manage our business in a way that is responsible to both the safety of people, to the protection of the environment, to the importance of communities in which we operate" (Methanex).

Examples such as this one were common primarily in the multinational corporations and industry sectors which may be under more pressure to mitigate the environmental impact of their operations (e.g. fossil fuels, industrial processes).

6.4.4 Doing the Right Thing

There was considerable discussion on the topic of "doing the right thing." Recalling that the interviewees were the designated responsibility for environmental issues in their organisations, their responses in general emphasised the need for social responsibility to be balanced with the competing logics of competitiveness and legitimacy which they also saw as critical to the long-term viability of their businesses.

An interviewee from liquid fossil fuels (Gull) explained how the organisation feels an ethical responsibility to address the issue and to help in finding solutions. "We're all human beings too, we feel the same way about climate change as you do, just because the products we sell contribute to it, there are things that we can do". This message was reiterated by the respondent from Holcim who argued that, "companies must do the right thing because it is right, not because it pays." This sense of general social responsibility to humanity and the environment, regardless of economic or institutional pressures, was common.

However, other respondents often justified their initiatives because they are rational, economic, and simply good business sense. For example, a member of the fossil fuel sector, and a multinational corporation (Chevron), was adamant that the organisation pursues initiatives which are rational and effective, not just ethical or ideological. The interviewee described their opposition to inappropriate environmental legislation.

"We have our own concerns about sustainability, and that is all to do with this business pragmatic view which is if you are going to make a change you must get a result out of the change, otherwise why make it? We are not in the business of making it look good, that is the political issue. We want there to be a real change and if there is not, why are we doing it? And stuff that's about appearing to do the right thing but not actually doing the right thing is not something I am personally interested in endorsing."

"Some people in the climate change arena believe that the only way you can get business to move is by legislating. For very large companies like mine, there's actually a lot of evidence to suggest that they've taken it on board themselves. In fact, between 2001 and now we [Chevron] have reduced the world's greenhouse gases more than the whole of New Zealand has, by itself…it hasn't waited for any government, it has just said this is the right and proper thing for us to do and we will do it. We made, at a very senior level in the company, a decision that we would, regardless of how much argument was going on among other players in the industry, accept the climate change issue, because if you're continually battling over whether or not it's an issue, then you don't act. But at the point that the company said "we share the concerns of publics and governments around the world about climate change", then it was easy to say, " what's our personal responsibility as an organisation in this, what is our moral position," not "what are we forced to do by the government."

Similarly, a respondent from a large publicly listed company in the liquid fossil fuels sector (New Zealand Refining Company) spoke of wanting 'to give our children a better future' and that they are "committed and we're going to do everything we can do to achieve that." He stated that "it's not for me to comment about other industries and other business leaders, but I've long held the view that good environmental practice is good business and there is a business case there to improve energy efficiency, I am just astounded that so few manage to make that connection and go after it. Good environmental practice is good business."

These narratives demonstrate how multinational and large publicly listed organisations have begun to align climate change with their existing corporate values. Taking action on climate change is seen as both an opportunity to improve economic efficiencies and act for the social good. Thus, where there is synergy between economic benefit and the social good, socially responsibility initiatives and good environmental practices are seen to be 'good business sense'.

In a similar vein, the interviewee from a small family-owned business in the fossil fuel sector (Gull) also emphasised how sustainability is integral to doing good business and there are multiple benefits to doing it: "corporate do-gooding" has "stood the test of time" and "there are just so many upsides to do this – it's an ongoing journey."

This sentiment was also expressed by representatives of the State-Owned Enterprises (SOEs) such as Genesis Energy. "We have obviously been mindful, I suppose as an SOE, but just as a good corporate citizen, that we had access to 700,000 customers, many of which were grappling with what climate change policy meant for them and their business and so certainly over the years we have led a number of forums for our customers to help them understand climate change; recognising that they did not necessarily have the ability to have a dedicated team on climate change policy like we have had here so we will try to impart that information to them."

This perspective was reiterated by another SOE from the agriculture sector (Landcorp), "As an SOE, you genuinely aren't told to do anything. But in the back of our mind we understand that we are responsible to the minister and therefore the government and, in the end, the taxpayers, I suppose, the New Zealand population."

These narratives demonstrate how a wide variety of organisations (Multinationals, SOEs, and small family owned businesses) have begun to anticipate institutional changes and have aligned climate change with their existing corporate values.

These examples serve to demonstrate that organisational size and orientation may not be a strong factor of influence on organisational perceptions and commitment to social responsibility. Irrespective of size and structure, these organisations see climate change action as "good business practice", both as an economic opportunity and an ethical one, in which they can maintain legitimacy, enhance competitiveness and adhere to social responsibilities. These beliefs are embedded in corporate values and are a significant motivating logic behind corporate action. Not only do these organisational actors want to do what is best for the environment, but they also want to make smart business decisions which achieve their anticipated outcomes. In this sense, social responsibility is a more significant motivation when there is a synergy with economic and legitimacy imperatives as well.

6.5 Chapter Summary

This concludes a review of the results emerging from the narrative analysis. In the process, a number of themes emerged which reflected the three primary motivations described by Bansal and Roth for understanding corporate responses to environmental issues, and in this case applied to climate change. This review also noted a range of other influential variables of interest to organisational climate change responses, such as organisational context (such as size and industrial sector) and the influence of managerial perceptions and designated responsibilities. In some cases, the results provided supporting evidence for past research and in other cases were divergent from the literature and failed to explain variations in response. In the next chapter, these findings will be examined in greater detail and some inferences made of the conditions under which certain factors will be more influential than others in understanding the motivations, drivers and barriers behind organisational responses to climate change.

Chapter Seven: Discussion

7.1 Introduction

In this chapter, I discuss the results in terms of their convergence and divergence with the theoretical models and propositions (in particular Bansal and Roth, 2000) reviewed in Chapter Two. In some cases, the actions taken by organisations as revealed in the narratives were explained in ways anticipated by the literature. But in other cases, the results diverged from expected outcomes and presented an opportunity to propose alternative explanations.

Of the models considered, the framework developed by Bansal and Roth (2000) was selected as the most suitable for analysing corporate responses to climate change. As argued in Chapter Two, the three motivating logics of competitiveness, legitimacy and social responsibility utilised in their Model of Corporate Ecological Responsiveness proved a useful framework for differentiating the themes which emerged from this study as shown in Table 2 of Chapter Six, and exploring the other contextual variables influencing their responses (as shown in Figure 4 of the Appendix Section 1). However, the Bansal and Roth model was developed to explain why firms decide to undertake environmental initiatives and their motivations were classified as fitting into one of three logics. For them, competitiveness and social responsibility were motives that triggered proactive behaviour, while the motive to gain or defend legitimacy was a reactive behaviour. The findings from this study demonstrate that this was not always the case.

Another limitation of the Bansal and Roth model is their focus on distinguishing primary motivations. While they do acknowledge instances of multiple or mixed motivations, the primary intention of their study was to explore the contexts behind each motivation. In examples which reflected multiple motivations, Bansal and Roth reduced them to the dominant motivation, by comparing actions with expressed motivations and identifying the relevant dimensions of the motivations that help discriminate among them (p. 723). While their model was particularly useful for exploring the research questions of this thesis, it is important to note that models are often simplifications, and the “messiness” of the real world, where corporate actions are driven by a complexity of motives, is not captured within their parameters.

Bansal and Roth found legitimacy to be the most predominant corporate motivation (with 24 out of 52 examples), followed by competitiveness (7 firms) and social responsibility (4 firms). In contrast to their findings, this research found a more even distribution of corporate motivations, with competitiveness as the most predominant motive. In this thesis, narratives revealing competitiveness logic were noted by all seventeen respondents and were found in all industry sectors and across all organisational structures. The same range (of industry sectors and organisational structures) was true for legitimacy, although mention of this was only found in fifteen interviews. The motivation for social responsibility appeared the least frequently, in eleven out of the seventeen interviews, representing all sectors and organisational structures except for forestry. This may be a result of the absence of consumer pressure in export markets, as most forestry exports are sent to countries where consumer environmental concerns are low.

This chapter will now review the narratives which are categorised by the motivations identified by the Bansal and Roth model. Next, the managerial and organisational level factors which were found to be a significant influence on corporate actions will be discussed. Finally, the motivations, drivers and barriers behind the reported actions will be identified.

7.2 Competitiveness

The themes which emerged under competitiveness logic represented a range of managerial perceptions on climate change. Some themes found climate change in conflict with economic priorities and a barrier to international competitiveness, whereas others saw it as an opportunity for corporate innovation and differentiation. Some of the themes reflected organisational cautiousness in the face of uncertainty over climate change legislation (specifically in relation to the proposed ETS), the difficulty of discerning "when to introduce new products" and the risk of "moving too early" when the market is not yet developed. Other themes signaled climate change as an opportunity, where organisations were keen to "be in front" and "be pioneers in innovation", "take advantage of opportunities," and "get ahead of their competitors."

For Bansal and Roth, competitiveness was strictly a proactive behaviour. Accordingly, for some firms in this study climate change represented an opportunity and competitiveness logic triggered a proactive response to get ahead of their competitors and be first to introduce new products. Many of the organisations had proactively researched on the efficiency of their operations, and made improvements in order to achieve 'international world's best practice' standards. They felt that such initiatives had led to improved efficiency, less resource use, reduced emissions (either overall or intensity based[4]), and could enhance their corporate reputation. Some organisations upgraded their assets and machinery, others invested in renewable energy technology, and others pursued carbon neutral certification.

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[4] Emissions can be limited by an absolute cap on the quantity of emissions or by some maximum allowable intensity relative to some measure of output or input, (such as per unit of economic activity GDP or unit of production such as barrel of oil). Under intensity based emission reduction schemes, an organisation can increase the total emissions from their operations as long as the emissions are the result of increased activity rather than a change in the emissions intensity of the production. http://www.mfe.govt.nz/publications/climate/discussion-paper-post-2012-dec06/html/page6.html

But for other firms in the study, competitiveness was a reactive response in order to maintain viability. The narratives of the Emissions Intensive Trade Exposed (EITE) organisations, for instance, were more focused on the impact that a carbon cost would have on their ability to maintain competitiveness with overseas competitors, rather than on seeking opportunities to get ahead of their international counterparts. This behaviour is not about opportunity seeking or maintaining corporate legitimacy by conforming to climate change legislation, but about maintaining a competitive position, and ensuring corporate survival. With its focus on proactive environmental responsiveness, the Bansal and Roth model does not address this aspect of corporate behaviour.

Competitiveness logic, in contrast to other motivations, resulted in greater attention paid to the cost-benefit analyses of ecological responses. Respondents often focused on the economics of climate change initiatives and the difficulty in making such investments due to the lack of availability of financial capital. In such cases competition was seen in a different sense – as internal competition for financial capital within the firm, rather than competition with market competitors. For example, one respondent (New Zealand Steel) described the extent of competition for capital across the business where environmental initiatives were a low priority for investment, apart from securing compliance. While they recognised that climate change initiatives may be more economical in the long term, if there was not a timely payback period (i.e. within 2 years) capital would not be made available for the investment. Other managers argued that their organisations would like to invest more in climate change initiatives but they had a commitment to provide returns to their shareholders, and that profit was the priority.

For these managers then, financial priorities were “the bottom line” and economic considerations were the primary drivers of their activities. In most cases climate change initiatives were seen as an ‘additional cost’ that the company could not afford under current economic conditions. Even when the respondents acknowledged the financial benefits from technological improvements in efficiency, the payback period of these investments was not short enough for them to justify the capital spending. During many of the interviews, the fact that these organisations provide products and services which are fundamental for maintaining New Zealand’s economic growth and current standard of living (such as energy, infrastructure, and everyday living products), was argued to outweigh the potential negative environmental impacts of their operations.

Balancing economic against environmental considerations was framed as an issue of corporate rationality where financial bottom lines are the first priority. Environmental actions were important considerations for protecting corporate reputation, but were often sacrificed during difficult times. As described by the representative from the Greenhouse Policy Coalition, “there is the ‘must have’ and then there is the ‘nice to have’. And the ‘must have’ is — you have got to be profitable.” Without the pressure of climate change regulation, these initiatives were seen as nice to have, or ‘beyond compliance,’ but that they could not be justified without economic benefits to the firm.

There were also examples that concurred with the findings of Kagan, Gunningham, and Thornton (2003) where in highly competitive commodity markets (such as cement, steel, and methanol for example), economic pressures eventually restrict proactive environmental action, particularly non-incremental environmental improvements through costly new technologies that are unlikely to pay for themselves in financial terms. This was often mentioned by those from the liquid fossil fuels and industrial processes sectors stating that, “you are in business to give a return to your shareholder,” and “it’s a challenge for a public company to report profitability every six months.” This position is commonly taken by many who argue that economic growth and environmental protection are largely incompatible; environmental protection must, by its very nature, reduce economic competitiveness (Walley & Whitehead, 1994; Palmer, Oates, & Portney, 1995 cited in Hoffman *et al.*, 1999).

Nevertheless, the energy intensive organisations were engaging in environmental protection activity in the form of improved efficiencies over and above climate change regulation. “We already had strong incentives to increase our efficiency and we have done it because we pay a lot of money for energy. Eighteen operations shut down in the United States last year because their costs are too high. So controlling our costs is the number one priority for us” (Norkse Skog). Such energy intensive organisations have always been driven to improve the efficiency of their operations and climate change regulation is just another motivation to improve efficiencies. However, financial limitations were always a constraint on the extent of efficiency improvements. These examples serve to support Bansal and Roth’s position that under the motivation of competitiveness, social initiatives are adopted only if they serve to enhance a firm's financial performance (Hajer, 1995; Levy and Rothenberg, 2002).

Yet not all the narratives were primarily associated with competitiveness logic. Many themes emerged which revealed a concern for gaining and maintaining legitimacy in the eyes of key stakeholders.

7.3 Legitimation

Bansal and Roth (2000) argue that legitimation refers to the desire of a firm to improve the appropriateness of its actions within an established set of regulations, norms, values, or beliefs (Suchman, 1995). According to them, these organisations focus not on proactive efforts but on reactions to external constraints to avoid sanctions.

A different set of concerns distinguishes this motivation from the other two, competitiveness and social responsibility (Bansal and Roth, 2000), where organisations aim towards complying with institutional norms and regulations. This was often mentioned in the narratives particularly by the multinational corporations (MNC), where it was crucial that the organisation maintained its ‘license to operate’ and that an appropriate climate change response was necessary for long term survival (by satisfying regulatory requirements and appeasing institutional expectations). These observations support the theoretical relationship between organisational legitimacy and organisational survival (Meyer & Rowan, 1977; Zucker, 1987).

According to Bansal and Roth’s study, firms motivated by legitimation were focused on the stakeholders most influential in prescribing or articulating legitimacy concerns (such as customers, local communities, or environmental interest groups), engaging not in proactive efforts but in reactive behaviour to external constraints made to avoid sanctions. In their study, one of their respondents characterised the purpose of compliance initiatives as follows, "I know our [environmental] policy is just a piece of paper. It is just for making stakeholders nice and warm and cuddly” (Bansal and Roth, 2000: 727). In contrast to Bansal and Roth, some respondents in my study were explicitly not interested in pursuing initiatives which were only ‘feel good’ or ‘warm and cuddly’. In fact, while these respondents showed concern about maintaining their license to operate they principally felt that organisations should not pursue such initiatives simply because they make the organisation and its customers ‘feel good’ but rather because it is genuinely good for the environment, and the ‘right thing to do’. As described by a manager from Chevron, “We are not in the business of making it look good that is the political issue. We want there to be a real change and if there is not, why are we doing it? And stuff that's about appearing to do the right thing but not actually doing the right thing is not something I am personally interested in endorsing…. You can measure the level of an organisation’s commitment in terms of how much profit it is prepared to forego.” The pre-emptive actions that organisations such as these have taken to reduce their emissions in light of political uncertainty would support that level of commitment.

Bansal and Roth found that, in accordance with efforts to avoid negative effects, their respondents also aimed to ‘satisfice’ – to meet standards rather than exceed them. However, several respondents in my study were adamant that their organisation was ‘beyond compliance,’ ‘world leading’ and setting an example for others in the industry. This was commonly argued by the Multinational Organisations, and those which primarily export overseas. These organisations often viewed themselves as being leaders in their own fields in emissions reductions and environmentally friendly consumer products.

For Bansal and Roth, legitimacy seeking was a reactive response to institutional pressure, driving the need for compliance with institutional norms and regulations. Similarly in my study, respondents frequently spoke of the need for "compliance," and that finances were always available for satisfying environmental regulations. These firms preferred to maintain a reactive stance, and ‘wait and see,’ hoping they could maintain legitimacy by ‘flying under the radar’ until there was a clearer indication of political commitments and consumer demand. Their passive stance was selected not only to minimise the risk of moving first into novel production processes and strategies, but also to enhance their legitimacy by imitating successful competitors, as predicted by Abrahamson and Rosenkopf (1993).

However, other organisations in my study expressed such a high degree of frustration with the legislative delays and political uncertainty with the ETS that they chose to adopt a proactive policy, in which they reasoned that a carbon charge was likely and that the best thing they could do was try to anticipate it. One respondent said ‘we can’t wait for government to make these decisions, so we made our own decisions on climate change a long time ago.’ Thus, in contrast with Bansal and Roth, there was evidence of proactive legitimation measures, particularly amongst the MNCs, who acknowledged the increasing international recognition of the issue and decided that it was necessary to prepare for climate change legislation, despite the delays. The organisations in my study, therefore, provided mixed support that in the face of legislative pressures organisations adopt reactive postures with the primary intention of maintaining legitimacy and protecting competitiveness.

Institutional theory suggests there is a limited norm of what is considered legitimate by the institutional environment, leading to competitive isomorphism, where organisations adopt the same prescribed actions to get performance benefits, resulting in homogeneity amongst industries (DiMaggio & Powell, 1983; Barney, 1991; Lieberman & Asaba, 2006). The institutional influence on the organisation can be subtle and is largely that of “fitting in” and operating “appropriately” (Scott, 1995). This may lead to isomorphic or mimetic responses by organisations in the same sector or interest group.

Consistent with institutional theory (DiMaggio & Powell, 1983), some organisations in this study exhibited similar responses (mimetic isomorphism) in complying with institutional norms and pressures and were motivated to comply in order to maintain their legitimacy. An example of a mimetic response was given by one organisation in the liquid fossil fuels sector who admitted that, while they were focusing on climate change initiatives which would differentiate them from their competitors, they began using recycled plastic bags in their stores because "everyone else" was doing it. From this perspective, convergent organisational responses to climate change can be seen as a result of institutional pressure.

Yet there were other examples of organisations seeking to differentiate themselves from others in their institutional field. Neo-institutionalists argue that organisations will be driven to seek differentiation. While institutional theory-based isomorphism predicts that organisations gain superior performance by conforming to an industry recipe (McNarama, Deephouse & Luce, 2003) other research suggests that legitimacy-based imitation contributes negatively to organisation profitability (Lieberman & Asaba, 2006). A middle-ground view is that organisations will make strategic choices that conform to an industry norm so as to gain access to the resources needed to survive, but will differentiate with other strategic choices that are within what is considered legitimate so as to create a competitive advantage that generates superior performance or higher profits than competitors. This will allow an organisation to achieve a strategic balance between being legitimate to the institutional environment and being competitive within the technical (competitive) one (Deephouse, 1999; Parnell & Hershey 2001; McNarama *et al.* 2003; Ravasi & van Rekom, 2003; Barreto & Baden-Fuller, 2006; Fernandez-Alles & Valle-Cabrera, 2006; Kostava *et al.* 2008 cited in Bui, 2009).

In this study, the drive for differentiation seemed to be triggered when there were other motivations at play - either competitiveness logic where market opportunities existed for them to do so or social responsibility logic, where it was seen as the right thing to do, or where both motives operated together. For example, the narratives showed that some of the organisations viewed climate change as an opportunity to be innovative and differentiate from their competitors – thereby maintaining legitimacy, achieving competitive advantage and fulfilling social responsibilities. As described by a manager from Gull, "We're going well beyond our compliance obligations as a company to say, 'Yeah, they're a business opportunity.' We've got a real focus on sustainability as a business and because of our investment in biofuels and because of our biodiesel manufacturing plant, that's always been a point of differentiation for us as a business. We're a small family run business compared with the oil majors…and we certainly know we've got the liabilities, it's how you actually deal with those." In contrast with the isomorphic/imitative postures motivated by legitimacy (Bansal and Roth, 2000) where firms would merely emulate each other within their organisational field, the drive for differentiation exhibited by some of the organisations in my study provided contradictory evidence.

However, not all respondents exhibited such confidence within their institutional field. Institutional pressures, viewed as an "iron cage" (DiMaggio & Powell, 1983), evoke images of passive compliance, with minimal latitude for negotiation or discretion - an image that fits the observations and concerns expressed by some of the respondents. They reported feeling that there was little they could do to influence political decisions and get their argument heard. Institutional theory suggests that organisations engage with industry associations to help deal with political uncertainty and controversial social issues in order to protect and maintain legitimacy in their organisational field (DiMaggio, 1988; Powell & DiMaggio, 1991; Scott & Meyer, 1994 cited in Suchman, 1995). Many of the organisations interviewed engaged with industry associations and interest groups (such as the Greenhouse Policy Coalition) on their position relative to the ETS. Some organisations engaged with industries in their sector, others with energy intensive groups. These groups served to help in understanding the legislative implications of the ETS, and come up with consolidated opinions and submissions.

Many of the respondents felt that working together also helped in creating a more powerful and unified message which gave them a greater chance of being heard by government. In addition, they provided a degree of protection to organisational legitimacy. As mentioned by a representative from the Greenhouse Policy Coalition, “These organisations are often conscious that as large emitters they need to be doing their bit and to be seen to be doing their bit. And to a certain extent that is why they join industry associations because they do not really like to be putting their head above the parapet and saying in a forthright way what they think needs to be said.” Consultation with industry groups was common in the agriculture sector and the energy intensive organisations, whereas the participants in the liquid fossil fuels and stationary energy sectors appeared much more independent in the development of their climate change response.

These examples also support Bansal and Roth’s argument that businesses will tend to work as a group to counterinfluence legislative pressures, notwithstanding the high degree of frustration expressed by some interviewees that they had little voice in the process. Oliver (1997) argues that uncertainty increases the influence of the institutional environment and reduces the impact of economic and competitive factors (in what she calls the "task environment"). Given the high level of uncertainty concerning climate change market developments, and policy responses, organisations cannot easily make a rational, objective assessment of their economic interests and appropriate strategic responses, and might therefore be more subject to institutional pressures (Levy and Rothenberg, 2002).

As predicted by Bansal and Roth, legitimacy was an important variable in corporate reputation. Some managers indicated that it was easier to hire quality employees if a firm had a better reputation. They said, for example, that theirs was not a ‘sexy industry,’ ‘not like they were making shampoo or something’ and that their organisation needed to have a good, clean reputation in order to attract and maintain the best employees (Holcim). These firms also engaged in more visible activities to improve their corporate environmental reputations, which they believed served to enhance the firms' competitive advantage, and could also be interpreted as enhancing legitimation. At the same time, many respondents stressed that the motivation to protect their corporate environmental reputations was not driven by legitimacy seeking alone. For some, their actions were also motivated by social responsibility concerns.

7.4 Social Responsibility

Bansal and Roth viewed social responsibility as a motivation that stems from the concern that an organisation has for its social obligations and values. Here the ethical aspects of environmental responsibility are emphasised and organisations are seen to act out of a sense of obligation, responsibility, or philanthropy rather than out of self-interest (Bucholz, 1991; L'Etang, 1995 cited in Bansal and Roth, 2000). When asked why they supported climate change initiatives, interviewees in this study often indicated that it was the "right thing to do", "we feel some responsibility to the environment," and "we must back up our environmental strategy with genuine concern for the environment." The research participants did follow these comments with examples of initiatives to support these claims.

Some organisations were pursuing initiatives that may not deliver the best financial returns, but were the right thing to do for the industry, the economy and the general public. For example, the CEO from the New Zealand Refining Company stated that his organisation was investing in research on improving the fuel economy of vehicle engines which was not directly beneficial to the refining business, but was ethically the right thing to do, in order to help reduce energy demands in the long term.

Respondents (such as BP, Chevron, NZRC, Methanex, Genesis Energy) often expressed a sense of moral obligation to the country, and their own children, and felt that the business community should take some responsibility for climate change. At the same time, however, respondents often refused to take full responsibility for helping New Zealand achieve emissions reduction, claiming that a significant root of the problem was human nature and that consumers needed to make behavioural changes in order for climate change to be successfully addressed. The lack of willingness for consumers to pay a premium for environmentally friendly products or efficiencies was often noted as a barrier to organisations (such as Ernslaw One and Ravesdown Fertiliser) attempting to introduce such products into the market, and whose prior initiatives have failed.

In fact, the respondent from BP said that climate change is not yet a visible and tangible issue to consumers. He argued that you need a 'real monster in the room' and you "need to have an immediacy effect" to motivate consumer behavioural change. Some respondents felt that the Government must also take some responsibility by encouraging initiatives such as improving public transport and infrastructure systems. Another (Chevron) commented "It's very fashionable at the moment for business to be the bad guy. We are jointly responsible for the state of the environment and if you want it to be different, stop driving. We will stop selling products when you stop driving. So do your bit." For many interviewees then, the responsibility for taking climate change action cannot rest with the business community alone but requires collective action by government, business and consumers.

Many managers (primarily from the EITE's and agriculture) felt the ETS was an inappropriate mechanism for achieving emissions reductions, that the policy was not "sending the right signals" or providing the right incentives for behavioural change. In the case that the ETS remained, they felt their organisations, by virtue of the fact that have already reduced their emissions as far as they can prior to the legislation, should be exempt from all regulation or be fully compensated with free allocations. Many said that compliance tools such as the ETS would be less effective than voluntary approaches such as the Negotiated Greenhouse Agreements (NGA), arguing that the NGA "encourages New Zealand industrial excellence, encourages New Zealand industrial growth, and encourages New Zealand to produce even more environmentally friendly products." Accordingly, many respondents felt that emissions reduction was more effective when it encouraged voluntary behaviour, rather than imposed through legislation, and that Government should be responsible for providing better infrastructure and incentives for behavioural changes by the public.

In summary, social responsibility was the least mentioned motivation in corporate climate change initiatives, and was often seen as a 'nice to have' rather than a 'must have.' In fact, given an environment of economic recession and political uncertainty, most of the interviewees admitted that there was very limited capital available for socially responsible initiatives and beyond compliance or consumer demand was difficult to pursue single-mindedly.

Indeed, the narratives often revealed that organisations were balancing economic considerations with the need for social responsibility and corporate citizenship, providing support for findings in the literature that environmental issues may be legitimated as an integral part of corporate identity on the basis of an internal economic focus or broader corporate social responsibility (Miles, 1987; Wood, 1991; Greening & Gray, 1994; Sharma *et al*., 1999). In fact, under a corporate social responsibility model, economic considerations may be balanced by the need for greater social responsibility and corporate citizenship (Miles, 1987).

7.5 Mixed Motives

Bansal and Roth acknowledged that mixed motives often occurred, but the focus of their study was to distinguish between the motivations and therefore their model did not accommodate mixed motives. As has often proven the case in my research findings, an action associated in the Bansal and Roth model with one motivating logic is described by interviewees as serving other motivating logics as well. While this made it difficult at times to discern the primary motivation behind the narratives emerging from the data, it clearly demonstrates how many corporate activities are based on mixed motives, and that the Bansal and Roth model is a simplification of the corporate thought process. The fact that nearly all respondents reported actions prompted by competitiveness logic (17 respondents) and legitimation seeking (15 respondents), and that only slightly less (11 respondents) reported actions associated with social responsibility shows the extent to which all logics were operating. Further, there were many examples given where motivating logics were balanced, such as economic concerns against social responsibility considerations, when weighing the appropriateness of an action. This strongly suggests that corporations use multiple criteria to determine strategic responses rather than singular motivations.

Another manifestation of mixed motives in my study was the insight that sometimes organisations develop multiple strategic stances in response to an issue. For instance, where there was a lack of synergy between forces of influence, some organisations chose to avoid immediate action and to develop a complexity of strategies for later deployment. Consider the following statement: “We’ve been asked, even in these times, to look at what opportunities are there and develop plans so financially when the time comes right, that we can implement those plans.” This is an example where an organisation has opted for a ‘wait and see’ approach because of current political uncertainty and the lack of synergy between economic and environmental considerations, but at the same time is developing plans to be initiated when those forces coalesce more favourably. Such instances also provide examples of how the defensive-opportunistic-offensive strategic continuum is not mutually exclusive. As noted by Kolk (2000), an organisation can adhere to one strategy openly while simultaneously preparing for change.

7.6 Significant Managerial and Organisational Variables

Many scholars have argued that managerial interpretations (the process by which managers make sense of events and other information in their environment (Dutton *et al.,* 1983), should have a significant influence on organisational actions and strategies. These processes will determine which events or information will be attended to by managers and those which will be ignored (Daft & Weick, 1984), and will subsequently influence organisational actions and strategies (Dutton *et al*., 1983; Daft & Weick, 1984; Dutton & Duncan, 1987 cited in Sharma & Nguan, 1999). In particular, one dimension relevant to explaining corporate environmental responsiveness strategies through which managers make sense of, or interpret, strategic issues is as a threat or an opportunity (Dutton & Jackson, 1987; Jackson & Dutton, 1988; Thomas & McDaniel, 1990; Sharma, 1997 cited in Sharma *et al*., 1999). In the context of my study, this was seen in the participants' attitude towards risk.

Managerial risk behaviour (the decisions which managers make on behalf of their organisations that involve a degree of risk in the expected outcomes) is relevant to organisational strategy because managerial decision-making and actions are influenced by desired and expected organisational outcomes (Sitkin & Pablo, 1992; Pablo, 1997; McNamara & Bromiley, 1997 cited in Sharma *et al*., 1999). If there is significant uncertainty that climate change initiatives (such as funding R&D, undertaking emissions reduction activities, introducing new products or services or transforming business objectives) will hinder corporate competitiveness or if there is significant stakeholder pressure for short term financial returns, it is likely that these initiatives will be seen as highly risky.

The discussion of risk was a common theme for all the research participants, but their attitude towards risk showed high variance. Some of the managers seemed to have a greater appetite for undertaking risky behaviours, which appeared to be a reflection of their organisations' strategic attitude as well. In the context of this study, managers with a risk-seeking propensity may be more likely to view climate change as an opportunity, while those who are risk averse may see climate change as a threat. Sharma and Nguan (1999) predict that the greater the degree to which a company's managers interpret environmental issues as opportunities, the greater the likelihood of the company undertaking voluntary or proactive environmental initiatives. Conversely, the greater the degree to which its managers interpret environmental issues as threats, the more likely the organisation will focus on conformance and undertake reactive environmental initiatives.

The range of responses from the interviewees in relation to risk provides an opportunity to examine the underlying reasons behind this variance. When managers interpreted a decision as leading to possible losses they were understandably risk averse, and when an organisation feels uncertain about policy outcomes and emerging markets for emission reduction related products and services, they may be more likely to undertake a 'wait and see' approach and delay climate change related initiatives. Conversely, some managers and organisations were clearly opportunity seekers in the face of risk and were unafraid to seize opportunities to innovate and differentiate from competitors. The variation seen in these managers' perceptions and appetites towards climate change risks suggests that it is an important factor in understanding their organisation's climate strategy.

It was also clear that the organisation's strategic attitude (the way in which a company reacts or proacts to market stimuli) played a significant role in their response. These findings supported Aragón-Correa (1998) who argued that strategic proactivity is positively related to a greater environmental proactivity, because strategically proactive companies (1) are used to modifying their products, to developing new markets and to undertaking new initiatives with less information and confidence about the possible effects; (2) count on more flexible technologies and are prepared to change them and (3) have organisational structures that facilitate innovation (Aragón-Correa, 1998 cited in Gonzalez-Benito & Gonzalez-Benito, 2006).

While no measure of the respondents' strategic attitude or appetite for risk was taken for this study, it was strongly suggestive from the variations that some managers and their superiors saw climate change as an opportunity to take advantage of new market opportunities (such as investment in renewable energy wind farms and biofuels) and were unafraid to fail. As described by a representative from the New Zealand Refining Company, "business leaders need to have the vision and the courage to actually go for these things… The world isn't certain – the world is risky, the world is full of opportunities – go out and get them, don't wait for the handout. We're going out and grasping the future." Such rhetoric demonstrates how an appetite for risk and opportunity seeking can influence managerial perceptions of climate change as an opportunity to differentiate themselves from their competitors, or as a barrier to investing in climate initiatives.

Managerial perceptions of climate change may also be constrained by a corporate identity that emphasises the maximisation of short-term financial performance objectives (Sharma, 2000). This study did provide some support for the proposition that environmental action was evaluated in the context of "good business sense," and that climate initiatives were often inhibited in the face of short term capital constraints. But the strategic focus of many of these organisations was more generally based on long-term considerations and the balancing of economic considerations with corporate social responsibility. These perceptions also seemed to be significantly influenced by factors of industrial sector, emissions level and resource use, as well as consumer and stakeholder pressure to take socially responsible actions - rather than simply short-term financial performance objectives.

7.6.1 Managerial Responsibility and Background

The research participants interviewed in this study held a range of different job titles and responsibilities (See Table 2 Appendix Section 1). Some came from economics, engineering, public relations or policy backgrounds, and others from environmental management and corporate social responsibility. The different professional backgrounds of these interviewees, and the evolution of their role as their organisation's designated climate change position, is another reflection of the organisation's interpretation of climate change and how they should respond to it. As such, when an economist holds the designated responsibility, it is clear that the organisation sees climate change as primarily a financial issue. Similarly, when the issue is dealt with from the policy and public relations department, it can be seen as a legitimation issue for that organisation.

As noted by Gonzalez-Benito (2006) the support and commitment of top management is known to have a significant influence on organisational environmental activity. This tends to allow more resources to be dedicated to the issue and greater collaboration and coordination across different departments within the organisation. For example, Del Brio *et al*. (2001) found that the higher the commitment of managers and their awareness of the advantages, disadvantages and tools of environmental management, the higher the formal importance they give to this question within the organisation. Such importance is manifested through the establishment of environmental departments or the appointment of managers to be in charge of environmental issues (Gonzalez-Benito & Gonzalez-Benito, 2006). This environmental champion can provide an important stimulus for environmental change (Fineman, 1997).

Others argue that not only is top management support necessary, but that a managers' beliefs, expectations, perceptions and opinions will influence the implementation of particular environmental practices (Fineman & Clarke, 1996; Cordano & Frieze, 2000; Flannery & May, 2000; Banerjee, 2001 cited in Lynes & Dredge, 2006). Depending on whether managers consider environmental management as an instrument to achieve competitive advantage, legitimation or, simply, greater environmental performance, they may develop different aspects of environmental proactivity accordingly.

The establishment of an environmental manager position responsible for overseeing organisational environmental impacts is also identified by Bansal and Roth as an initiative derived from legitimating motives. Yet in my research, many of these managers reflected a more innovative and opportunistic outlook which was part of a deliberate organisational strategy to proactively seek opportunities to differentiate from competitors in climate change. This managerial stance was beyond an action merely intended to gain legitimacy but also to enhance competitiveness through differentiation and to fulfil social obligations.

The role of these positions was wide ranging and the strategic attitude diverse. Some of the interviewees were the sole responsibility to manage the organisation's climate change related initiatives and responses. However, very few of the respondents spent all of their time on climate change related work, and their time commitment was highly variable. While there remained a range in these managers' attitude towards risk, mostly they were opportunistic and encouraged the organisation to take proactive, and possibly risky, measures to fulfill their social responsibility obligations.

In the role of environmental champion, some of the managers interviewed faced internal conflicts with other business units on the desirability of socially responsible actions. This may be the case when climate change is not necessarily in line with existing corporate strategy and requires a significant change in business operations or strategic direction. Other managers reported that their own approaches to climate change were very much in line with existing corporate values, fit easily into existing sustainability or socially responsible initiatives, and that climate change was a topic of interest to the Board. When organisations intended to change strategic direction, in some cases this was well accepted by its employees, while in others there was conflict between business units within the organisation. Where there was conflict, organisations often made the strategic determination at the highest level on the organisation's climate change position. Such organisations (particularly those in the agriculture industry) invested significant time in knowledge dissemination and consultation on climate change science, impacts and policy to encourage a more coordinated and cohesive attitude with their employees, shareholders and consumers. As noted by Bansal and Roth, the decision process was often based on the values of powerful individuals or on the organisation's values rather than a widely applied decision rule. In instances of significant conflict of opinion within the organisation, the decision was made at the highest level of the company to avoid any fundamental differences of opinion which can serve to impede organisational decision making and progress.

Where environmental concerns are intertwined with corporate values, managers have been able to support their case for action. In some cases in this study, the perceptions of environmental managers of their responsibility and role towards climate change can be seen to have a significant influence on other employees within their organisation and in some cases on corporate action. In other cases, the perceptions of the environmental manager were not shared by other employees in their organisation, or apparently embedded in the corporate culture, making it more difficult to "make the case" for environmental action. Such differences between managerial perceptions and organisational values and strategies within the organisation can pose a barrier to opportunistic planning and action. Managers who see climate change as a highly salient environmental issue and have an attitude for risk which is in line with the corporate strategic attitude will be more likely to perceive climate change as an opportunity, but may still face difficulties with the inertia of others within the organisation. When concern for the environment becomes an integral component of corporate identity, environmental issues become "harder to disown" (Weick, 1988: 310), which provides justification and legitimation for further commitment (Dutton & Dukerich, 1991: 549, cited in Sharma, 2000).

7.6.2 Organisational Characteristics

According to the literature, the characteristics of the organisation (such as company size, internationalisation, position in the value chain, industrial sector and emissions level) may be important factors of influence on the intensity of stakeholder pressure, and need to maintain legitimacy. The large companies and the multinationals (MNCs) are usually the most exposed to stakeholder interest, particularly in relation to the natural environment. They are the target of green consumers, non-governmental organisations, environmental regulators and the media since they are often viewed as leaders which set an example for their industry, and their actions have significant social and environmental repercussions. Larger organisations and MNC's also tend to enjoy economies of scale and attain high profits, which make them more vulnerable to accusations of abusing market power (Gonzalez-Benito & Gonzalez-Benito, 2006). Such visibility makes it more important for large organisations to maintain legitimacy (Bui, 2009).

From the narratives in my study, there was evidence that Multinational Corporations were indeed concerned about maintaining their license to operate. As described by the respondent from Chevron, "it's important for us to maintain our social license to operate. And you don't get a social license to operate when you're belching black smoke into the sky. Never mind whether you should or not, whether you've decided ethically whether you should or not, pragmatically you wouldn't be permitted to operate in that way." This theme is also in line with the findings of Bansal and Roth (2000) who argued that a 'license to operate' was a common motivation of corporate legitimacy and that threats a firm's legitimacy can undermine its license to operate and long-term survival. Such observations also support the theoretical relationship between organisational legitimacy and organisational survival (Meyer & Rowan, 1977; Zucker, 1987).

Yet there were also counterexamples in this study demonstrating that organisational size and orientation may not be a strong factor of influence on organisational perceptions and commitment to social responsibility. Irrespective of size and structure, some organisations saw climate change action as "good business practice", both as an economic opportunity and an ethical one, in which they can maintain legitimacy, enhance competitiveness and adhere to social responsibilities. Thus, the evidence from this study that organisational size and orientation are strong factors of influences on social responsibility is mixed.

7.6.3 Motivations and Drivers, Opportunities and Barriers

The results demonstrate that the primary motivations for corporate actions stemmed most frequently from competitiveness and legitimation logics. Less but still frequent were those actions motivated by social responsibility, where managers felt that it was important to 'do the right thing'. Bansal and

Roth argued rather simplistically that competitiveness motivated proactive behaviour while legitimation logic prompted reactive behaviour. In this light, Bansal and Roth categorised compliance to regulation as just another example of reactive behaviour, but this does not distinguish in a meaningful way between the "push and pull" effects of different motivations on organisations.

A more useful concept for distinguishing between the differing influences on organisational behaviours in this study is provided by Okereke (2007) in the distinction between motivations, drivers and barriers. Motivations refer to the factors that can be said to arise more or less directly from, say, the raison d'etre of business to maximise profit, while a driver is defined as forcing action that organisations may not otherwise take. For example, regulation was a significant driver for organisations in this study rather than a motivation, causing them to take action they may not otherwise consider taking. Because the Emissions Trading legislation was only pending rather than enforced, some organisations created the opportunity to anticipate the regulation and put actions in motion that would place them in a good position, competitively and in terms of social responsibility. Similarly, in the theme entitled 'Climate Change: Beyond Debate,' climate change was seen as a given and an issue to which organisations are now required to respond, not an issue to be debated. In contrast to being a "motivator" to action, it is more in line with the concept of a driver, as discussed by Okereke (2007), as it is forcing action that organisations may not otherwise take. It also does not preclude organisations from taking proactive behaviour, as they can be driven to engage in anticipatory behaviour. This frees us from the limitation of the Bansal and Roth model where companies are seen to behave only reactively to avoid sanctions.

This study also provided insight into what barriers organisations faced in determining appropriate climate change action, and the reasons why a firm would not take action. Where Bansal and Roth saw contextual factors of influence as enabling response, this study captured examples where contextual factors could form a barrier to response. As already observed, the Bansal and Roth model is only concerned with why firms adopt environmental responses, rather than why they do not. Their model does not consider the barriers to corporate action, which are important considerations in this research study.

Okereke refers to barriers as factors that inhibit companies from adopting proactive environmental activities. (Perceived) high costs (or negative cost-to-benefit ratios), knowledge gaps, absence of adequate environmentally friendly alternatives and a lack of co-operation by stakeholders (shareholders, suppliers, customers, governments etc.) are often-mentioned barriers (Runhaar et al., 2008). Okereke (2007) also includes a lack of clear, long-term and robust policy framework, uncertainty about government's action in the issue of climate change, and uncertainty about the marketplace.

One of the most significant barriers which emerged from this study was in relation to political and market uncertainty. This was perceived to be a significant impediment to corporate decision making, as the extent of legal liabilities and the economics of investment opportunities were unknowns, causing a "wait and see" strategic stance for many of the organisations interviewed. In addition, the current economic recession was seen as a significant barrier to corporate activity, as their present activities were significantly impeded by existing economic forces. Lack of resources (as noted by Mair and Jago, 2010) in the context of limited financial capital available for investment in environmental initiatives was also a commonly mentioned barrier in the organisational context. In circumstances where there is a lack of synergy among economic, political or market forces, organisations are more inclined to delay any intended climate change initiatives.

Alternatively, opportunities arose for the organisations in this study when there was synergy between forces. For instance, when consumer demand for environment or climate friendly products was sufficiently strong (market forces), this allowed the organisations to take action they believed was right from an ecological perspective (environmental forces), as well as positioning themselves competitively (economic forces).

Issue salience is one of the factors of influence identified by Bansal and Roth and is defined as the extent to which a specific environmental issue has meaning for organisational constituents. Many respondents in this study expressed concern that while customers were increasingly interested in the climate impact of their products, they were 'unwilling to pay' extra for it. In the stationary energy sector, for example, the primary concern of customers was the price of electricity, not whether it was from renewable sources or not.

Where issue salience is high, consumers are more aware of the climate impact of their actions and the products they use. However, high issue salience for consumers may not always translate to increased demand if, while they demand more information about the climate impact of products, consumers continue to be unwilling to pay a premium for environmental benefits. Only when high issue salience translates into increased demand is a market opportunity created. Where issue salience was low, organisations were more likely to perceive climate change as a barrier and forced into a "wait and see" stance, rather than attempting to launch green products too early.

Position in the supply chain, which determines proximity to the final consumer, has also been identified in the literature as an important factor in influencing the environmental responsiveness of a company. This is due to the fact that consumer pressure is high for the manufacturers of finished products and loses strength the higher the manufacturer's position in the supply chain (Gonzalez-

Benito & Gonzalez-Benito, 2006). The literature suggests that pressure is growing on firms, not only from consumers but from manufacturers, demanding assurance of environmental commitment from their suppliers in many industries (Industry News, 1999; Wilson, 2000 cited in Gonzalez-Benito & Gonzalez-Benito, 2006). However, there were limited examples given during these interviews of firms' own supplier choices being determined on the basis of environmental standards. In the case of the multinational organisations which participated in this study, this may be due to the fact that their parent company overseas already addresses these issues. In a New Zealand context, this may be a result of decade's worth of political uncertainty, resulting in a lack of institutional pressure or voluntary markets which apply supply chain pressure.

Many of the research participants (particularly those which are emissions intensive trade exposed – EITE) felt that emissions trading was not the most effective or efficient mechanism for encouraging emissions reductions, that the policy was not "sending the right signals" or providing the right incentives for behavioural change. In the case that the ETS remained, they felt their organisations, by virtue of the fact that have already reduced their emissions as far as they can prior to the legislation, should be exempt from all regulation or be fully compensated with free allocations. Many of the EITE said that compliance tools such as the ETS would be less effective than voluntary approaches such as the Negotiated Greenhouse Agreements (NGA), which encourages major New Zealand industries to invest in achieving world's best practice in greenhouse gas emissions management, and allow for economic growth, while providing relief from any regulated emissions charge.

There was also widespread agreement among the respondents that the responsibility for responding to climate change should be shared jointly by government, business and consumers in order to be effective. This suggests that, in their view, the ETS as a market-based instrument that targets businesses to reduce their emissions, may not on its own provide an adequate solution to the challenge of climate change. That these representatives from the business community are not willing to take sole responsibility (in the sense that they are the obligated parties engaged in emissions reporting and market trading) for environmental problems, on the basis of fairness as well as economics, may prove a significant limitation to this policy unless they are convinced that consumers, and government itself, are all playing their part. In challenging economic times such as that presented by the current recession, there are greater incentives to exploit the environment as opposed to preserving it. To meet the challenge, a more collaborative effort among all of the players, and demonstrable responsibility sharing, may be needed.

7.7 Chapter Summary

In some cases, the results from this study corresponded with findings from the literature. There was support for the operation of competitiveness, legitimacy and social responsibility motivations behind corporate actions in response to climate change. Yet it was clear that models are often simplifications that fail to capture the complexity of corporate motivations and reactions, and, as a result, some of the findings from this study diverged from those predicted by past research. As environmental champions for their organisations (e.g. Fineman, 1997), the interviewees, through their stories, provided insights into why some managers perceived opportunities where others perceived barriers, and why some organisations failed to take action where others took proactive environmental measures. It demonstrated the role of synergy between factors of influence in creating opportunities and putting up barriers, and the role of risk propensity and organisational mindset in determining the appetite for opportunity seeking and risk taking. Perhaps most importantly, the interviewees provided insight into why some businesses may flourish and others languish as a result of climate change legislation.

Chapter Eight: Conclusion

In developing a strategic response to climate change which targets emissions reduction, New Zealand faces a particularly difficult set of issues due to a unique emissions profile dominated by high levels of agricultural emissions, extensive forestry plantations, and a high proportion of electricity already derived from renewable sources. After nearly a decade of debate, New Zealand policy makers have chosen an Emissions Trading Scheme (ETS) as the perceived least cost mechanism for achieving emission reduction targets by providing economic incentives to industry for reducing greenhouse gas emissions. Its success requires the business community to embrace emission reduction initiatives in their production processes, consumption patterns, and product lines. Therefore, an understanding of the motivations and barriers underlying corporate response to climate change, and the ETS, is crucial in predicting what circumstances are likely to lead to firms embracing the ETS, and take action on climate change in general, perceiving an opportunity rather than a threat to their long-term viability. However, efforts to understand the key factors that either drive or inhibit corporate responses to climate change have been limited. Research to date has primarily focused on an international context, relying on websites, reports, or survey questionnaires for investigation but lacking in-depth analysis at a local level.

The aim of this study, therefore, was to determine if (and to what extent) there was diversity in corporate responses to climate change and emissions trading legislation across the main industry sectors in New Zealand, as well as to explain why this is so. The study focused on three specific research questions: what are the underlying drivers (risks and opportunities) which motivate and/or inhibit corporate action to address climate change; what are the significant managerial perceptions and organisational variables that affect corporate responses to climate change; and to what extent are corporate climate responses influenced by conventional business logic, institutional/organisational processes, and ethical responsibility/responses to public pressure?

8.1 Reviewing the Research Findings

A sample of organisations across sectors of primary interest to New Zealand climate change policy, based on the obligated actors in the Emissions Trading Scheme regulations, participated. The interviewees were senior managers with designated responsibility for climate change within the sample organisations. The methodology selected was a semi-structured, in-depth interview which allowed respondents the freedom to discuss issues of greatest interest and of most concern to them. As a result, what emerged was a mosaic of stories, or more accurately “bits” of stories, revealing their reactions, and those of their respective organisations, to the ETS and climate change. Using narrative analysis, the interview data were then analysed to address the research questions. In some cases, the actions taken by organisations as revealed in the interview data were explained in ways anticipated by the literature. But in other cases, the results diverged from expected outcomes and presented an opportunity to propose alternative explanations.

An analysis of these narratives revealed a number of diverse themes that were emphasised by interviewees and which grouped or differentiated their responses. These appeared to hold particular significance for the interviewees by virtue of their prominence during discussions. The themes themselves revealed how similarly or differently interviewees perceived the opportunities and barriers of climate change in relation to their own organisation's mission and actions, and the array of values and reasons given to rationalise those positions. The application of a well recognised and generalisable model in environmental literature, the Bansal and Roth (2000) Model of Corporate Ecological Responsiveness, then provided a framework to consider each theme in terms of the motivating logic behind it, and then to identify the strongest factors of influence at the various levels of context informing that logic. The three motivating logics of competitiveness, legitimacy and social responsibility proved a useful framework to frame the study as well as for differentiating the themes which emerged from the results.

Of the three motivations, competitiveness logic was the most commonly attributed motivation influencing corporate responses to climate change. All the interviewees mentioned that protecting the financial viability and providing sufficient returns to shareholders was a primary motivation in determining corporate response, particularly in the context of the current economic recession and political uncertainty over climate change legislation. Legitimation seeking emerged as the next most frequently cited motivation driving corporate response, where respondents cited the importance of "being seen to be compliant" by their various stakeholders, including the government, shareholders, and consumers. Least, but still frequent, was social responsibility cited as the motivation behind responses. Respondents expressed a sense of moral obligation to the country, society and their own children to "do the right thing" and that social responsibility was deeply embedded in their corporate identity. These results diverged from those of Bansal and Roth, who found legitimacy to be the most predominant motivation for ecological responsiveness. In contrast to their findings, this research found a more even distribution of corporate motivations, with competitiveness as the most predominant motive. Both studies found social responsibility to be the least evident motive.

In attempting to associate themes with their underlying logic, it was clear that most responses were informed by mixed motives. This illustrated the simplicity of the Bansal and Roth model (which aimed to separate and identify dominant motivations) in failing to capture the complexity behind corporate thought processes where, in the real world, a wide range of circumstances and conditions can require strategies to meet multiple motives. For instance, examples were given of economic considerations being balanced by the need for greater social responsibility and corporate citizenship when developing corporate responses.

For Bansal and Roth, competitiveness and social responsibility were motivations that triggered proactive behaviour, while legitimation seeking was a reactive behaviour – primarily to maintain legitimacy with stakeholders rather than enhance it. Accordingly, for some firms in this study climate change represented an opportunity and competitiveness logic triggered a proactive response to get ahead of their competitors and be first to introduce new products. Other proactive behaviours were initiated from a sense of social responsibility where taking initiative on climate change was the "right thing to do" for the industry, the economy and the general public. Legitimation on the other hand, was primarily seen as an effort to satisfy stakeholder concerns, to protect the organisation's 'license to operate' and that an appropriate climate change response was necessary for long term survival. However, the results from this study provided counterexamples that showed competitiveness could also trigger reactive behaviour, as illustrated by firms who were forced to adopt stances in order to maintain viability. Similarly there were examples of legitimation seeking as a proactive behaviour, such as firms who, frustrated with the political uncertainty and legislative delays, decided to eschew a "wait and see" policy and instead adopt proactive behaviours to reduce their carbon emissions in anticipation of the legislation. In addition, there were examples of firms taking multiple strategic stances that allowed them to wait out policy introductions while at the same time undertaking actions that would allow them to launch new initiatives when the time was right.

Some results could be tested against institution theory. For instance, institutional theory suggests that organisations engage with industry associations to help deal with political uncertainty and controversial social issues in order to protect and maintain legitimacy in their organisational field. There was clear support for such behaviour in this study where many of the organisations engaged with industry associations and interest groups as they felt there was little they could do on their own to influence political decisions and get their argument heard. Institutional theory also suggests there is a limited norm of what is considered legitimate by the institutional environment, leading to competitive isomorphism, in that organisations adopt the same prescribed actions to get performance benefit. An example of that was provided by one firm engaging in recycling plastic bags because it was expected in their industry.

Yet there were other examples in the study which did not support traditional institutional theory, such as the instances of organisations seeking to differentiate themselves from others in their institutional field. These examples support the neo-institutionalist argument that organisations will be driven to seek differentiation for competitive advantage, such as the findings of Deephouse (1999), Levy and Rothenberg (2002) and Pulver (2007), who observed that organisations "seeking a competitive advantage should be as different as legitimately possible". The results also showed a range in managerial attitudes and organisational responses to climate change with respect to risk propensity and the acceptance of risk. This provided insight into why some respondents perceived climate change as an opportunity to differentiate from their competitors while others perceived risk and for whom climate change presented a barrier.

But factors of influence were also seen to play an important role in helping to create an opportunity or a barrier out of climate change. Where synergies operated between the factors, such as economic, institutional and market forces, it was attractive for firms to innovate and differentiate. For instance, where issue salience was high for consumers, who were willing to pay a premium price for green products, this allowed firms to introduce climate friendly products and services to enhance competitive advantage was well as maintain legitimacy and practice social responsibility. Because this study offered participants the chance to explain why actions were and were not taken, in contrast with the Bansal and Roth study which examined only why firms took action, it provided insights to the motivations and drivers behind actions and non-actions, and proactive and reactive behaviours.

Overall, the insights gained from this study provide a greater understanding of the concerns of the business community towards climate change and emissions trading legislation. In turn, this may help anticipate under what circumstances organisations are likely to maintain viability and even enhance competitiveness while operating in an environment effected by climate change. The participants argued that targeting the business community alone may be detrimental to economic growth and ultimately the general public's standard of living, and that Government and the wider public need to take greater responsibility for the problem. Successful implementation of climate change legislation will ultimately rely upon the capacity of Government to override their concerns and achieve wide-ranging public support and engagement in finding and implementing an effective strategy to respond to climate change.

8.2 Limitations and Future Directions

Given the timing of this study, there may have been more emphasis on economic considerations than would otherwise have occurred. As these interviews were conducted during the most serious economic recession for many decades, this would have had a significant influence on the business community in New Zealand and the concerns of the managers interviewed in this study. In particular, many of the respondents reported that they were under pressure to help cut costs and prioritise economic considerations, in spite of their social responsibility roles.

As this study aimed to explore the perceptions of senior managers towards climate change across a range of industry sectors and organisational structures, future research could provide deeper insights by targeting a range of employees, and materials, by organisation and by industry sector, to reveal a greater complexity of organisational and sector-specific issues associated with climate change. Future research should also consider the impact of the ETS on both obligated organisations and those which are not, as well as targeting consumers whose attitudes and behaviours will clearly play an important determining role in the outcome of the ETS. Indeed, following the implementation of the ETS, future research needs to continue to explore how all the key stakeholders in New Zealand are responding to climate change science and policy, and what methods will be most effective in encouraging collective behavioural changes. Overall, the insights gained from this study may provide a greater understanding of the concerns of the business community towards climate change and what conditions will be most conductive to encouraging corporate climate change action.

References

Abrahamson, E., & Rosenkopf, L. (1993). Institutional and competitive bandwagons: Using mathematical modeling as a tool to explore innovation diffusion. *Academy of Management Review*, *18*(3), 487-517.

Albino, V., Balice, A., & Dangelico, R. M. (2009). Environmental strategies and green product development: An overview on sustainability-driven companies. *Business Strategy and the Environment*, *18*(2), 83-96.

Aldrich, H. E., & Pfeffer, J. (1976). Environments of organizations. *Annual Review of Sociology, 2*, 79-105.

Alvesson, M., & Skoldberg, K. (2000). Reflexive methodology: New vistas for qualitative research. *Reflexive Methodology: New Vistas for Qualitative Research*.

Aragon-Correa, J. A. (1998). Strategic proactivity and firm approach to the natural environment. *Academy of Management Journal*, *41*(5), 556-567.

Ashcroft, C. (2006). *Academics' experiences of Performance-Based Research Funding (PBRF): Governmentality and subjection*. Unpublished Ph.D thesis. Dunedin:University of Otago.

Azzone, G., Bianchi, R., Mauri, R., & Noci, G. (1997). Defining operating environmental strategies: Programmes and plans within Italian industries. *Environmental Management and Health, 8*(1), 4-19.

Backstrand, K., & Lovbrand, E. (2006). Planting trees to mitigate climate change: Contested discourses of ecological modernization, green governmentality and civic environmentalism. *Global Environmental Politics, 6*(1), 50-75.

Buhrs, T. (2003). From diffusion to defusion: The roots and effects of environmental innovation in New Zealand. *Environmental Politics, 12*(3), 83-101.

Buhrs, T., & Christoff, P. (2006). 'Greening the Antipodes'? Environmental policy and politics in Australia and New Zealand. *Australian Journal of Political Science, 41*(2), 225-240.

Bailey, I. (2007). Market environmentalism, new environmental policy instruments, and climate policy in the United Kingdom and Germany. *Annals of the Association of American Geographers*, *97*(3), 530-550.

Bakker, K. (2005). Neoliberalizing nature? Market environmentalism in water supply in England and Wales. *Annals of the Association of American Geographers*, *95*(3), 542-565.

Banerjee, S. B. (2001). Managerial perceptions of corporate environmentalism: Interpretations from industry and strategic implications for organizations. *Journal of Management Studies, 38*(4), 488-513.

Bansal, P., & Clelland, I. (2004). Talking trash: Legitimacy, impression management, and unsystematic risk in the context of the natural environment. *Academy of Management Journal, 47*(1), 93-103.

Bansal, P., & Roth, K. (2000). Why companies go green: A model of ecological responsiveness. *Academy of Management Journal*, *43*(4), 717-736.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99-120.

Baylis, R., Connell, L., & Flynn, A. (1998). Company size, environmental regulation and ecological modernization: Further analysis at the level of the firm. *Business Strategy and the Environment*, *7*(5), 285-296.

Bebbington, J., Higgins, C., & Frame, B. (2009). Initiating sustainable development reporting: Evidence from New Zealand. *Accounting, Auditing and Accountability Journal, 22*(4), 588-625.

Blaikie, N. (2000). *Designing social research.* Cambridge: Polity Press.

Boyce, M. E. (1996). Organizational story and storytelling: A critical review. *Journal of Organizational Change Management*, *9*(5), 5-26.

Boykoff, M. T. (2007). Flogging a dead norm? Newspaper coverage of anthropogenic climate change in the United States and United Kingdom from 2003 to 2006. *Area, 39*(4), 470-481.

Bui, B. (2009). Determinants of Organisational Political Reaction to Emissions Trading Bill: Evidence from New Zealand. Available at SSRN: http://ssrn.com/abstract=1441025

Bulkeley, H., & Kern, K. (2006). Local government and the governing of climate change in Germany and the UK. *Urban Studies, 43*(12), 2237-2259.

Chen, Y. S., Lai, S. B., & Wen, C. T. (2006). The influence of green innovation performance on corporate advantage in Taiwan. *Journal of Business Ethics, 67*(4), 331-339.

Cowen, P. (1997) Neo-liberalism in Miller, R. (ed). *New Zealand Politics in Transition.* Auckland, Oxford University Press.

Cunliffe, A. L., Luhman, J. T., & Boje, D. M. (2004). Narrative Temporality: Implications for Organizational Research. *Organization Studies, 25*(2), 261-286.

Czarniawska, B. (1998). *A Narrative Approach to Organization Studies*. London: Sage.

Daft, R. L., & Weick, K. E. (1984). Toward a model of organizations as interpretation systems. *Academy of Management Review, 9*(2), 284-295.

Davies, B., & Harré, R. (2001). Positioning: The discursive production of selves. In M. Wetherell, S. Taylor & S. Yates (Eds.), *Discourse theory and practice: A reader* (pp. 261- 271). London: Sage Publications.

Deephouse, D. L. (1999). To be different, or to be the same? It's a question (and theory) of strategic balance. *Strategic Management Journal, 20*(2), 147-166.

Del Brio, J. A., Fernandez, E., Junquera, B., & Va¡zquez, C. J. (2001). Environmental managers and departments as driving forces of TQEM in Spanish industrial companies. *International Journal of Quality and Reliability Management, 18*(5), 495-511.

DiMaggio, P. J., & Powell, W. W. 1983. The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review,* 48: 147-160.

Dunn, S. (2002). Down to business on climate change: An overview of corporate strategies. *Greener Management International*(39), 27-41.

Dutton, J. E., & Duncan, R. B. (1987). The influence of the strategic planning process on strategic change. *Strategic Management Journal, 8*(2), 103-116.

Dutton, J. E., Fahey, L., & Narayanan, V. K. (1983). Toward understanding strategic issue diagnosis. *Strategic Management Journal, 4*(4), 307-323.

Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment, 11*(2), 130-141.

Engels, A., Hisschemöller, M., & von Moltke, K. (2006). When supply meets demand, yet no market emerges: The contribution of integrated environmental assessment to the rationalisation of EU environmental policy-making. *Science and Public Policy, 33*(7), 519-528.

Ferguson, P., & Ferguson, D. (1995). The interpretivist view of special education and disability: The value of telling stories. In T. Skrtic (Ed.), *Disability and democracy* (pp. 104-121). New York: Columbia University/Teacher's College Press.

Feldman, M. S., Skoldberg, K., Brown, R. N., & Horner, D. (2004). Making Sense of Stories: A Rhetorical Approach to Narrative Analysis. *J Public Adm Res Theory, 14*(2), 147-170.

Fernandez-Alles, M., Cuevas-Rodraguez, G., & Valle-Cabrera, R. (2006). How symbolic remuneration contributes to the legitimacy of the company: An institutional explanation. *Human Relations, 59*(7), 961-992.

Fineman, S. (1997). Constructing the Green Manager. *British Journal of Management, 8*(1), 31-38.

Fineman, S., & Clarke, K. (1996). Green stakeholders: Industry interpretations and response. *Journal of Management Studies, 33*(6), 715-730.

Fontana, J. S. (2004). A methodology for critical science in nursing. *Advances in Nursing Science, 27*(2), 93-101.

Funk, W. (1992). Free Market Environmentalism: Wonder Drug or Snake Oil. *Harvard Journal of Law and Public Policy,* 15:2: 511-517.

Franzosi, R. (1998). Narrative analysis - or why (and how) sociologists should be interested in narrative, *Annual Review of Sociology* (Vol. 24, pp. 517-554).

Garrison, R. M., & Massam, B. H. (2001). Changing governments and changing environmental policies in Ontario: A discourse analysis. *Local Environment, 6*(3), 327-349.

Greening, D.W. and Gray, B., (1994). Testing a Model of Organizational Response to Social and Political Issues, *The Academy of Management Journal* 37, 3, 467-498.

Gonzalez-Benito, J., & Gonzalez-Benito, O. (2005). An analysis of the relationship between environmental motivations and ISO14001 certification. *British Journal of Management, 16*(2), 133-148.
Gonzalez-Benito, J., & Gonzalez-Benito, O. (2006). A review of determinant factors of environmental proactivity. *Business Strategy and the Environment*, *15*(2), 87-102.
Gubrium, J. F., & Holstein, J. A. (1998). Narrative practice and the coherence of personal stories. *Sociological Quarterly, 39*(1), 163-187.
Gunningham, N., Kagan, R. A., & Thornton, D. (2003). *Shades of Green: Business, Regulation, and Environment*.
Hahn, T., & Scheermesser, M. (2006). Approaches to corporate sustainability among German companies. *Corporate Social Responsibility and Environmental Management, 13*(3), 150-165.
Hajer, M. (1995). *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process*.
Hart, S. L. (1997). Beyond greening: Strategies for a sustainable world. *Harvard Business Review, 75*(1), 66-76.
Hastings, A. (1999). Analysing power relations in partnerships: Is there a role for discourse analysis? *Urban Studies, 36*(1), 91-106.
Hoffman, A. J. (1999). Institutional evolution and change: Environmentalism and the U.S. chemical industry. *Academy of Management Journal*, *42*(4), 351-371.
Hoffman, A. J. (2002). Examining the rhetoric: The strategic implications of climate change policy. *Corporate Environmental Strategy*, *9*(4), 329-337.
Hoffman, A. J. (2005). Climate change strategy: The business logic behind voluntary greenhouse gas reductions. *California Management Review, 47*(3).
Hoffman, A. J., & Ventresca, M. J. (1999). The institutional framing of policy debates: Economics versus the environment. *American Behavioral Scientist*(8), 1368-1392.
Hoffman, A. J., & Ventresca, M. J. (2002). *Organizations, Policy and the Natural Environment: Institutional and Strategic Perspectives*.
Howard-Grenville, J. A. (2006). Inside the "black box": How organizational culture and subcultures inform interpretations and actions on environmental issues. *Organization and Environment, 19*(1), 46-73.
Jeswani, H. K., Wehrmeyer, W., & Mulugetta, Y. (2008). How warm is the corporate responses to climate change? Evidence from Pakistan and the UK. *Business Strategy and the Environment, 17*(1), 46-60.
Jones, C. A., & Levy, D. L. (2007). North American Business Strategies Towards Climate Change. *European Management Journal, 25*(6), 428-440.
Jootun, D., McGhee, G., & Marland, G. R. (2009). Reflexivity: promoting rigour in qualitative research. *Nursing standard (Royal College of Nursing (Great Britain) : 1987), 23*(23), 42-46.
Kirk, N.A. 2008. Children of the market? The impact of neoliberalism on children's attitudes to climate change. University of Canterbury Masters Thesis. http://hdl.handle.net/10092/1039
Kolk, A. (2000). *Economics of Environmental Management*.
Kolk, A. (2001). Multinational enterprises and international climate policy. *Non-state Actors in International Relations*, 211-225.
Kolk, A., & Hoffmann, V. (2007). Business, Climate Change and Emissions Trading:: Taking Stock and Looking Ahead. *European Management Journal, 25*(6), 411-414.
Kolk, A., & Levy, D. (2001). Winds of Change: Corporate Strategy, Climate change and Oil Multinationals. *European Management Journal, 19*(5), 501-509.
Kolk, A., & Levy, D. (2003). Multinationals and global climate change: Issues for the automotive and oil industries, *Research in Global Strategic Management* (Vol. 9, pp. 171-193).
Kolk, A., & Levy, D. (2004). Multinationals and global climate change: Issues for the automotive and oil industries. *Multinationals, Environment and Global Competition*, 171-193.
Kolk, A., Levy, D., & Pinkse, J. (2008). Corporate responses in an emerging climate regime: The institutionalization and commensuration of carbon disclosure. *European Accounting Review, 17*(4), 719-745.

Kolk, A., & Mauser, A. (2002). The evolution of environmental management: From stage models to performance evaluation. *Business Strategy and the Environment*, *11*(1), 14-31.

Kolk, A., & Pinkse, J. (2004). Market strategies for climate change. *European Management Journal, 22*(3), 304-314.

Kolk, A., & Pinkse, J. (2005). Business responses to climate change: Identifying emergent strategies. *California Management Review, 47*(3).

Kolk, A., & Pinkse, J. (2008). A perspective on multinational enterprises and climate change: Learning from "an inconvenient truth"? *Journal of International Business Studies, 39*(8), 1359-1378.

Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing*.

Larner, W. (2000). Post-welfare state governance: Towards a code of social and family responsibility. *Social Politics, 7*(2), 244-265.

Larner, W. (2005). Neoliberalism in (regional) theory and practice: The stronger communities action fund in New Zealand. *Geographical Research, 43*(1), 9-18.

Lees, L. (2004). Urban geography: Discourse analysis and urban research. *Progress in Human Geography, 28*(1), 101-107.

Levy, D. L., & Egan, D. (2003). A neo-Gramscian approach to corporate political strategy: Conflict and accommodation in the climate change negotiations. *Journal of Management Studies, 40*(4), 803-829.

Levy, D. L., & Kolk, A. (2002). Strategic Responses to Global Climate Change: Conflicting Pressures on Multinationals in the Oil Industry. *Business and Politics, 4*(3), 275-300.

Levy, D. L., & Newell, P. (2000). Oceans apart? Business responses to global environmental issues in Europe and the United States. *Environment, 42*(9), 8-20.

Levy, D. L., & Rothenberg, S. (2002). Heterogeneity and change in environmental strategy: Technological and political responses to climate change in the global automobile industry. *Organizations, Policy and the Natural Environment: Institutional and Strategic Perspectives*, 173-193.

Lieberman, M. B., & Asaba, S. (2006). Why do firms imitate each other? *Academy of Management Review, 31*(2), 366-385.

Lofland, J., & Lofland, L. H. (1995). *Analyzing Social Settings: A Guide to Qualitative Observation and Analysis*.

Luhman, J. T. (2000). Searching for organizational democracy in labor-managed firms: A narrative study of the literature. *Dissertation Abstracts, 61*, 4457.

Lynes, J. K., & Andrachuk, M. (2008). Motivations for corporate social and environmental responsibility: A case study of Scandinavian Airlines. *Journal of International Management, 14*(4), 377-390.

Lynes, J. K., & Dredge, D. (2006). Going green: Motivations for environmental commitment in the airline industry. A case study of Scandinavian Airlines. *Journal of Sustainable Tourism, 14*(2), 116-138.

Mair, J., & Jago, L. (2010). The development of a conceptual model of greening in the business events tourism sector. *Journal of Sustainable Tourism, 18*(1), 77-94.

Mansfield, B. (2004). Neoliberalism in the oceans: "Rationalization," property rights, and the commons question. *Geoforum*, *35*(3), 313-326.

Maykut, P., & Morehouse, R. (1994). *Beginning qualitative research, a philosophical and practicle guide.* London: The Falmer Press.

Maynard-Moody, S., & Musheno, M. (2000). State Agent or Citizen Agent: Two Narratives of Discretion. *Journal of Public Administration Research and Theory, 10*(2), 329-358.

McCarthy, J., & Prudham, S. (2004). Neoliberal nature and the nature of neoliberalism. *Geoforum, 35*(3), 275-283.

Meyer, J. W., & Rowan, B. 1977. Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology,* 83: 340 -363.

Ministry for Economic Development. (2009). Energy Greenhouse Gas Data 2009. http://www.med.govt.nz. Website Accessed 10 September 2009.

Ministry for the Environment. (2006). *Discussion Paper on Measures to Reduce Greenhouse Gas Emissions in New Zealand Post-2012.* http://www.mfe.govt.nz/publications/climate/. Website accessed on 4 September 2009.
Ministry for the Environment (2007a). *New Zealand's climate change solutions: An overview.* http://www.mfe.govt.nz/publications/climate/climate-changesolutions-overview-sep07/climate-change-solutions-overview-sep07.pdf. Website accessed 20 September 2009.
Ministry for the Environment. (2007b). *The Framework for a New Zealand Emissions Trading Scheme.* http://www.climatechange.govt.nz/files/ets-executive-summary-complete.pdf. Website accessed 5 August 2009.
Ministry for the Environment (2009) New Zealand's Fifth National Communication Under the United Nations Framework Convention on Climate Change. http://www.mfe.govt.nz/publications/ climate. Website accessed on 10 September 2009.
Ministry for the Environment (2006) New Zealand's Fourth National Communication the United Nations Framework Convention on Climate Change. http://www.mfe.govt.nz/publications/ climate. Website accessed on 20 August 2009.
Ministry for the Environment (2009a) New Zealand's Fifth National Communication Under the United Nations Framework Convention on Climate Change. http://www.mfe.govt.nz/ publications/climate. Website accessed on 20 August 2009.
Ministry for the Environment. (2009b) New Zealand's Greenhouse Gas Inventory 1990 – 2007: An Overview. http://www.mfe.govt.nz/publications/climate/ Website accessed on 5September 2009.
Muhovic-Dorsner, K. (2005). Evaluating European climate change Policy: An ecological justice approach. *Bulletin of Science, Technology and Society, 25*(3), 238-246.
New Zealand Institute of Economic Research (NZIER). (2008). *The impact of the proposed Emissions Trading Scheme on New Zealand's economy*. Public Discussion Document. Working Paper 2008/2, Wellington.
New Zealand Government. (2007). Helen Clark Berlin Speech: Sustainable Development http://www.scoop.co.nz/stories/PA0711/S00552.htm. Website accessed 10 October 2009.
Okereke, C. (2007). An Exploration of Motivations, Drivers and Barriers to Carbon Management:: The UK FTSE 100. *European Management Journal, 25*(6), 475-486.
Oliver, C. (1991). Strategic responses to institutional processes. *Academy of Management Review, 16*(1), 145-179.
Oliver, C. (1997). Sustainable competitive advantage: Combining institutional and resource-based views. *Strategic Management Journal, 18*(9), 697-713.
Orru, M., Biggart, N. W., & Hamilton, G. G. (1991). Organizational isomorphism in East Asia. *The New Institutionalism in Organizational Analysis*, 361-389.
Palmer, G. (1990). *Environmental Politics: A Greenprint for New Zealand.* Dunedin, John McIndoe Ltd.
Parson, E. A. (2006). Reflections on air capture: The political economy of active intervention in the global environment - An editorial comment. *Climatic Change*, 74(1-3), 5-15.
Peck, J. (2004). Geography and public policy: Constructions of neoliberalism. *Progress in Human Geography, 28*(3), 392-405.
Pinkse, J. M. (2007). Corporate intentions to participate in emission trading. *Business Strategy and the Environment, 16*(1), 12-25.
Pool, I. (1996). Socio-economic and structural changes in New Zealand: an overview. *Environmental implications of Socio-Economic and Structural Change in New Zealand.* Wellington, The Royal Society of New Zealand: Miscellaneous series 40.
Porter, M. E., & Van der Linde, C. (1995). Green and competitive: Ending the stalemate. *Harvard Business Review, 73*(5), 120-134.
Prakash, A. (1999). A new-institutionalist perspective on ISO 14000 and responsible care. *Business Strategy and the Environment, 8*(6), 322-335.
Prakash, A. (2001). Why do firms adopt 'beyond-compliance' environmental policies? *Business Strategy and the Environment, 10*(5), 286-299.
Prudham, S. (2004). Poisoning the well: Neoliberalism and the contamination of municipal water in Walkerton, Ontario. *Geoforum, 35*(3), 343-359.

Richardson, L. (2000). Writing: A method of inquiry. In N. Denzin & Y. Lincoln (Eds.), *Handbook of Qualitative Research* (2nd ed., pp. 923-948). Thousand Oaks, CA: Sage Publications.

Runhaar, H., Tigchelaar, C., & Vermeulen, W. J. V. (2008). Environmental leaders: Making a difference. A typology of environmental leaders and recommendations for a differentiated policy approach. *Business Strategy and the Environment, 17*(3), 160-178.

Russo, M. V., & Fouts, P. A. (1997). A resource-based perspective on corporate environmental performance and profitability. *Academy of Management Journal, 40*(3), 534-559.

Ryan, M. L. (1992). The modes of narrativity and their visual metaphors. *Style, 26*, 368-387.

Rubin, H., & Rubin, I. (1995). *Qualitative interviewing: The art of hearing data.* California: Sage Publications.

Soderberg, A. M. (2006). Narrative interviewing and narrative analysis in a study of a cross-border merger. *Management International Review, 46*(4), 397-416.

Scott, W. R. (1995). *Institutions and Organizations*. Thousand Oaks, CA: Sage Publications.

Scott, W. R. (2001). *Institutions and Organizations*: Thousand Oaks, CA: Sage Publications.

Sharma, S. (2000). Managerial interpretations and organizational context as predictors of corporate choice of environmental strategy. *Academy of Management Journal, 43*(4), 681-697.

Sharma, S., & Nguan, O. (1999). The biotechnology industry and strategies of biodiversity conservation: The influence of managerial interpretations and risk propensity. *Business Strategy and the Environment, 8*(1), 46-61.

Sharma, S., Pablo, A., & Vredenburg, H. 1999. Corporate environmental responsiveness strategies: The importance of issue interpretation and organizational context. *Journal of Applied Behavioral Science*, 35: 87-108.

Sharp, L., & Richardson, T. (2001). Reflections on foucauldian discourse analysis in planning and environmental policy research. *Journal of Environmental Policy and Planning, 3*(3), 193-209.

Shrivastava, P. (1995). Environmental technologies and competitive advantage. *Strategic Management Journal, 16*(SPEC. ISSUE), 183-200.

Smart, G. (1999). Storytelling in a Central Bank: The Role of Narrative in the Creation and Use of Specialized Economic Knowledge. *Journal of Business and Technical Communication, 13*(3), 249-273.

Statistics New Zealand. (2009). New Zealand Business Demography Statistics: At February 2009. http://www.stats.govt.nz/ Website accessed on 5 September2009.

Stavins, R., Whitehead, B. (2005). Market-Based Environmental Policies in Dryzek J., Schlosberg, D. (eds). *Debating the Earth. The Environmental Politics Readers.* Oxford, Oxford University Press.

Strandholm, K., Kumar, K., & Subramanian, R. (2004). Examining the interrelationships among perceived environmental change, strategic response, managerial characteristics, and organizational performance. *Journal of Business Research*, *57*(1), 58-68.

Suchman, M. C. (1995). Managing legitimacy: Strategic and institutional approaches. *Academy of Management Review, 20*(3), 571-610.

Sveningsson, S., & Alvesson, M. (2003). Managing managerial identities: Organizational fragmentation, discourse and identity struggle. *Human Relations, 56*(10), 1163-1193.

Taylor, S. (2001). Locating and conducting discourse analytic research. In M. Wetherell, S. Taylor & S. Yates (Eds.), *Discourse as data: A guide for analysis* (pp. 5-48). London: Sage.

Titscher, S., Meyer, M., Wodak, R., & Vetter, E. (2000). *Methods of text and discourse analysis.* London: Sage.

The Treasury. *New Zealand Economic and Financial Overview 2009*. http://www.treasury.govt.nz/economy/overview/2009/. Website accessed on 20 January 2010.

The Treasury. (2010). *New Zealand's Kyoto Position.* http://www.treasury.govt.nz/government/kyotoposition Website accessed on 10 April 2010.

Thomas, J. B., & McDaniel, R. R. (1990). Interpreting strategic issues: Effects of strategy and the information-processing structure of top management teams. *Academy of Management Journal, 33*(2), 286-306.

Tolich, M., & Davidson, C. (1999). *Starting fieldwork: An introduction to qualitative research in New Zealand.* New Zealand: Oxford University Press.

Tregidga, H., & Milne, M. J. (2006). From sustainable management to sustainable development: A longitudinal analysis of a leading New Zealand environmental reporter. *Business Strategy and the Environment, 15*(4), 219-241.

United Nations Framework for Climate Change Convention. (2008). *Kyoto Protocol.* http://unfccc.int/kyoto_protocol/items/2830.php.Website accessed 24 September 2009.

Von Seht, H. (2002). Socio-economic impacts of local environmental policies: An analysis for the field of climate protection. *Local Environment*, *7*(1), 23-34.

Walley, N., & Whitehead, B. (1994). It's not easy being green. *Harvard Business Review, 72*(3), 46-52.

Weick, K. E. (1995). *Sensemaking in Organizations*. Thousand Oaks, CA: Sage.

Welford, R. (1997). *Hijacking Environmentalism: Corporate Responses to Sustainable Development*. Earthscan: London.

Wetherell, M. (2001). Editor's introduction. In M. Wetherell, S. Taylor & S. Yates (Eds.), *Discourse theory and practice: a reader* (pp. 10-28). London: Sage.

Wiles, J. L., Rosenberg, M. W., & Kearns, R. A. (2005). Narrative analysis as a strategy for understanding interview talk in geographic research. *Area*, *37*(1), 89-99.

Wood, D. J. (1991). Corporate social performance revisited. *Academy of Management Review, 16*(4), 691-718.

Zucker, L. G. (1987). Institutional theories of organization. *Annual review of sociology. Vol. 13*, 443-464.

Appendix

Section 1: Theoretical Models

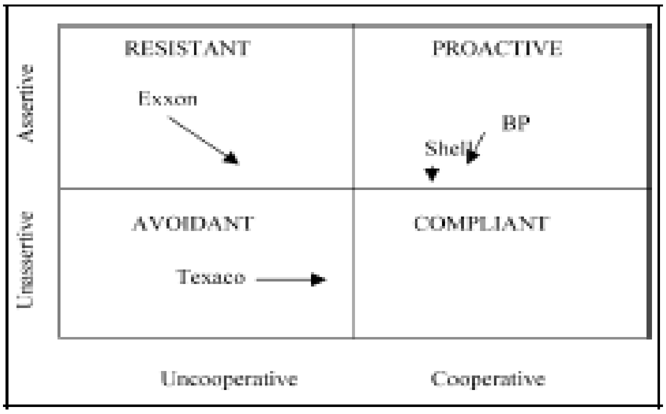

Figure 1: Corporate responses to climate change by oil multinationals. Note: Positions as of 1998 with arrows indicating subsequent movement. Source: Levy and Kolk (2002: 289).

Motivation	Exemplary Quotes	Number of Firms Showing Strong Evidence
Competitiveness	It was seen as good business management to turn a waste product into something which has value. Environmental initiatives are seen as both an environmental opportunity and a business opportunity. There are a number of firms which are thinking about how to establish an ecobusiness. . . . The expense for environmental conservation is becoming so big that there are plenty of business opportunities. Jealousy, competitiveness, call it what you like. That is what drives the organization. It is greed and competition. And I suppose if we're brutally honest about it, if environmental issues have volume, put money in the till, then it will become a primary consideration. We did environmental management because of our concern for citizenship. Yet, in the end, this can be related to money. Environment is going to be some kind of business strategy.	3 food retailers 1 P&O company 2 Japanese companies 1 other
Legitimation	The worst scenario is that we do something stupid and then we pay for it in the way of fines, penalties, and lousy reputation. At the end of the day, we are talking about insurance. We wanted improve the image . . . and make it easier for us to operate. The business issues are forced home through stakeholders, which include customers, employees, shareholders, peer competitors, suppliers, and increasingly more, the local community. We are trying to gain legitimacy or credibility with stakeholders and also with competitors. We will do what we need to do legally.	1 food retailer 5 auto manufacturers 4 oil companies 7 P&O companies 2 Japanese companies 5 others
Social responsibility	It's something that we can do, costs nothing to do it, and it's the right thing to do from our standpoint, the right thing to do from the consumer's standpoint. Overall, when I show you our policy, the thing that we talk about in our policy is being committed to working with government to find the best reward for what is best for the environment. I don't mean what is best for our industry or for [us] but what is best for society. It's about being a good environmental citizen, about being responsible. There's nothing wrong with doing good. Proving that we are aware of what we should be doing . . . irrespective of the financial situation of the business. We are talking about managing a better company. . . . The "better" is that in the true sense there is the moral better. We want to be because we can afford to be. We've always recognized that the feel-good factor is important and this is just one of the ways in which this is built up.	3 food retailers 1 P&O company

Figure 2: Exemplary quotes demonstrating three primary motivations for ecological responsiveness. Source: Bansal and Roth (2000: 725).

Motivations	Profits
	Credibility and leverage in climate policy development
	Fiduciary obligations
	Guiding against risk
	Ethical Considerations
Drivers	Energy prices
	Market shifts
	Regulation and government directives
	Investor pressure
	Technological Change
Barriers	Lack of strong policy framework
	Uncertainty about government's action
	Uncertainty about the marketplace

Figure 3: Summary table of motivations, drivers, and barriers to corporate climate activities.

Source: Okereke (2007: 481).

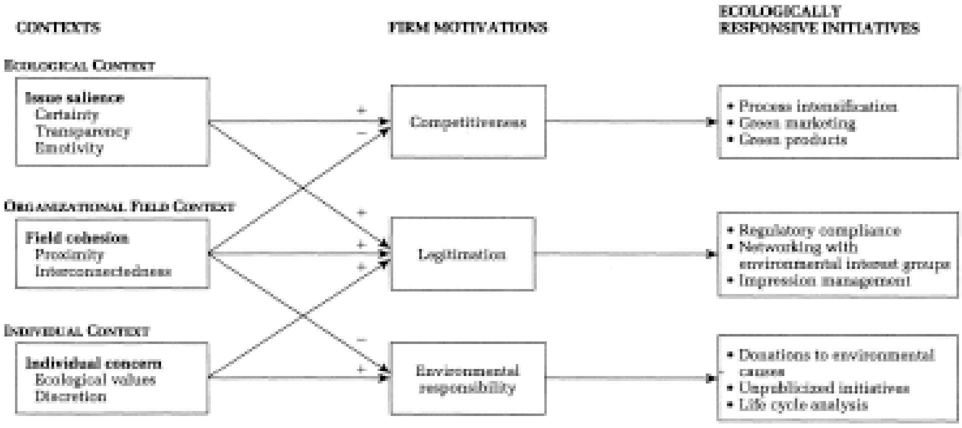

Figure 4: An advanced model of corporate ecological responsiveness.

Source: Bansal and Roth (2000: 729).

Emissions Intensive Trade Exposed (EITE) Organisations and the New Zealand Emissions Trading Scheme

The key purpose of the NZ ETS is to enable New Zealand to comply with its international obligations under the UNFCCC and the Kyoto Protocol (including for reducing and reporting on emissions levels) at least cost to the economy while providing certainty for economic growth, equity and flexibility to respond to possible changes in the post-2012 international framework. However, there has been significant concern prior to amendments in 2009 that the NZ ETS (as designed in 2008 and subsequently amended in 2009) may not meet these objectives, given currently weak state of the economy and the failure of international agreement on climate change at the UNFCC Copenhagen conference in 2009.

A number of problems were identified with the NZ ETS during the submission process. Of particular interest has been in how to strike a balance between New Zealand's environmental and economic interests.

Economic impacts

There have been concerns that the NZ ETS (as designed in 2008) may cause large negative economic impacts on key sectors and the economy as a whole. These concerns are exacerbated by the current economic downturn and the harmonisation of NZ ETS with Australia's proposed Carbon Pollution Reduction Scheme (the CPRS). There are 2 main areas of concern.

Initial impacts of the NZETS on businesses given the current economic climate

There is a need to provide smoother transition into the scheme while participants are dealing with the current recession and becoming familiar with their obligations and the operations of carbon markets. The concern is that while carbon markets are immature there could be potentially high and volatile carbon prices in early years of the scheme. It may be difficult for firms to manage their liabilities in such an uncertain environment.

The loss of production from key industries

The concern about loss of production is greatest for firms that are both emissions-intensive (where production leads to significant levels of emissions) and trade-exposed (competing against goods produced in other countries that do not face similar emissions costs). The fear is that a loss of competitiveness for these EITE will result in carbon leakage, with market share being lost to countries that do not have emissions reduction policies in place. This will see a loss in production in New Zealand with no global environmental benefit.

There is justification for providing greater protection to avoid the loss of key industries that are expected to be competitive once international competitors adopt equivalent carbon pricing regimes and there is a concern that the phase-out of free allocation under the current scheme may cause key industries to lose competitiveness. Other countries (in particular Australia) are developing emissions trading schemes incorporating greater assistance for at-risk firms than is currently provided under the NZ ETS.

Differences between the emission trading schemes of both countries, particularly levels of protection, could have a large impact on levels of trade between the 2 countries. EITE industries likely to be affected by the NZ ETS which may form a significant part of trans-Tasman trade include—

- aluminium oxide:
- copper:
- dairy products:
- petroleum:
- pulp and paper:
- iron or non-alloy steel.

Together, these categories of export are worth around NZ$500 million and NZ$1.5 billion per annum to New Zealand and Australian exporters respectively. Seen only in terms of trans-Tasman trade, this represents a significant proportion – around 7% of trans-Tasman exports from New Zealand (possibly rising to 10% of New Zealand exports if it assumed that all 'confidential exports' are emissions-intensive) and around 15% of Australian exports.

These figures describe areas of export risk for trans-Tasman trade. They also describe some of the key areas of import substitution risks if the importers concerned are being treated more favourably than domestic producers. However, this is not an exhaustive list – risks to exports and import substitution could change when a carbon price is introduced and could expand to other sectors.

The main source of competitiveness concerns relates to the allocation of permits under the New Zealand and Australian schemes. Stakeholders in both countries have raised this as an issue. The proposed CPRS currently allows for intensity-based allocation. Under this method, allocation is awarded on a unit of production basis for particular activities, based on the industry average emissions for that activity for the period from 2006 to 2008. The total pool of allocation to the industry sector is uncapped and both new and existing firms will be eligible for assistance. Initial levels of assistance are 94.5% of emissions for highly emissions-intensive activities, and 66% for moderately emissions-intensive activities. The free allocation is phased out at the rate of 1.3% per annum.

This method of allocation provides greater protection to levels of competitiveness because it minimises the marginal impacts of an emissions price. It provides an incentive for firms to improve efficiency, but does not provide an incentive to reduce levels of output against business as usual.
In contrast, the NZ ETS currently prescribes a cap on the total pool of free allocation to the industrial sector equivalent to 90% of 2005 emissions from eligible firms. The free allocation is phased out from 2018 to 2030 (a faster rate than under the CPRS). This method aims to avoid large reductions in output and unemployment but otherwise leaves firms facing the full cost of carbon including for new growth. This would invariably lead to some reduction in output.

Differences in allocation methodology between the 2 countries could also affect longer-term investment decisions and there is a risk that industries may shift production across the Tasman. It is difficult to quantify the potential extent of this occurring.

In summary, although competitiveness will depend on a variety of factors, all other things being equal, differences in allocation methodologies could cause certain activities to become more productive in one country over another, leading to one country losing market share or production shifting across the Tasman.

Source: Climate Change Response (Moderated Emissions Trading) Amendment Bill 85-1 (2009), Government Bill. http://www.legislation.govt.nz/bill/government/2009/

Section 3: Research Methods

3.1 Interview Strategy and Details

All organisation interviews included a director or senior manager responsible for climate change related activities. Interviews were conducted primarily at managers' offices and ranged from 49 minutes to 1 hour 40 minutes, with most about an hour long. Three interviews were conducted over the phone (and recorded on speakerphone), in an isolated room so no-one could overhear the conversation.

Respondents were provided with an overview of the interview content, describing the aim of the research and the six primary topics of the interview including: the nature of their job within the organisation, the risks and opportunities associated with climate change, the factors which have influenced the organisation's position, how climate change is coordinated and communicated within the organisation, their position on climate change policy and corporate social responsibility, and their position and relationship with other organisations in the industry.

The advantage of the semi-structured interview is that it allows people to articulate what is most salient to them (Weiss, 1994). The disadvantage is that the interviews cover slightly different topics. As a result, the numbers of people identified here as expressing various views do not represent the full number who might articulate them if asked directly. On the other hand, asking directly could induce some people to generate views, on the spot, in order to meet the interviewer's apparent interest (Fischoff, 2007). Thus there was considerable variation in the amount of time dedicated to particular issues, and not all interview content is comparable, as many industry specific issues were discussed.

It should also be noted the imbalance in the data sets was a result of the time limitations of the interview, and the particular points of interest to the research participant. Some interviewees only had an hour while others were free to carry on for up to an hour and 40 minutes. Some interviewees were very elaborate and descriptive in their responses and answered particular questions without being prompted, while other interviewees needed more probing. In some cases, it was clear that the interviewee had a predetermined idea of what they 'wanted to say' without regard for the specific questions I wanted to ask. Therefore, some of the content from these transcripts is volunteered while others was prompted based on the semi-structured interview questionnaire. Due to time constraints, if the interviewee answered the question without being prompted, the researcher did not ask it again. However it should be noted that the respondent may have provided a different answer, if they were asked the question rather than having volunteered it. Moreover, it is important to acknowledge an imbalance in the dataset as every interviewee emphasised certain questions and neglected others.

3.2 Research Participants

Number of Respondents	Research Participants Job Title/Designated Responsibility
6	Environment Manager
2	Energy Manager
2	Public Affairs Manager
1	Regulatory Analyst
2	Corporate Strategy Manager
2	Sustainability Manager
1	Communications Manager
1	Innovations Manager
2	Climate Change/Carbon Analyst
1	Executive Director
1	Chief Executive Officer

Table 1: An overview of the research participants designated responsibility within their respective organisations.

3.3 Organisations Invited to Participate

Contacted Organisations	Sector	Response
Meat and Wool	Agriculture	Agreed to Participate, Interviewed
Westland Milk	Agriculture	Declined to Participate
Landcorp	Agriculture	Agreed to Participate, Interviewed
Fonterra	Agriculture	Agreed to Participate
Dairy NZ	Agriculture	Agreed to Participate
Ravensdown	Agriculture	Agreed to Participate, Interviewed
Pork NZ	Agriculture	No Response
Ernslaw One	Forestry	Agreed to Participate, Interviewed
Carter Holt Harvey	Forestry	No Response
Norske Skog	Forestry	Agreed to Participate, Interviewed
Pan Pac	Forestry	Declined to Participate
Rayonier	Forestry	No Response
Whainiho	Forestry	No Response
Fletcher Building	Industrial Processes	Agreed to Participate, Interviewed
Rio Tinto	Industrial Processes	No Response
Holcim	Industrial Processes	Agreed to Participate, Interviewed
New Zealand Steel	Industrial Processes	Agreed to Participate, Interviewed

Methanex	Industrial Processes	Agreed to Participate, Interviewed
Oceanea Gold	Industrial Processes	No Response
Oi	Industrial Processes	No Response
Chevron	Liquid Fossil Fuels	Agreed to Participate, Interviewed
BP	Liquid Fossil Fuels	Agreed to Participate, Interviewed
Sanford	Liquid Fossil Fuels	Declined to Participate
Air New Zealand	Liquid Fossil Fuels	Agreed to Participate
Gull	Liquid Fossil Fuels	Agreed to Participate, Interviewed
OMV	Liquid Fossil Fuels	No Response
New Zealand Refining Company	Liquid Fossil Fuels	Agreed to Participate, Interviewed
Shell Todd Oil Services Limited	Liquid Fossil Fuels	No Response
Exxon Mobil	Liquid Fossil Fuels	No Response
Genesis	Stationary Energy	Agreed to Participate, Interviewed
Meridian Energy	Stationary Energy	Agreed to Participate
Solid Energy	Stationary Energy	Declined to Participate
Transpower	Stationary Energy	No Response
Contact Energy	Stationary Energy	Agreed to Participate, Interviewed
Mighty River Power	Stationary Energy	Agreed to Participate, Interviewed
Orcon	Stationary Energy	No Response
Vector	Stationary Energy	No Response
Todd Energy	Stationary Energy	No Response
Origin Energy	Stationary Energy	No Response
Westpac	Banking Corporation	No Response
BNZ	Banking Corporation	No Response
Greenhouse Policy Coalition	Industry Association	Agreed to Participate, Interviewed
Carbon Group	Environmental Consultancy	No Response
Total	44 Organisations	22 Agreed, 18 No Response, 4 Declined

Table 2: Organisations invited to participate in research and their responses. Note: Several organisations were invited to participate which had made submissions to the New Zealand Emissions Trading Review Committee, but were not obligated entities under the scheme (Westpac, BNZ, Carbon Group). Invitations were sent, in an effort to gain additional insight from the perspective of non-obligated entities, but none of these invitations were accepted.

3.4 Brief Description of Participating Organisations

FORESTRY SECTOR

Norske Skog is owned by a Norwegian company and is the second largest manufacturer of newsprint in the world. It produces newsprint from wood sourced from sustainable plantation forests. With a large demand for wood, it is a significant contributor to the viability of the forest products industry in New Zealand (www.norskeskog.com/).

Ernslaw One Ltd has the fourth largest forest estate and is one of the largest owners of private Kyoto-compliant forests in New Zealand. The company is one of Malaysia's biggest timber harvesters, processors and marketers and has other interests in shipping, newspaper publishing and optical fibre cable manufacturing. The main species in the North Island is Pinus radiata and Douglas-fir in the South. All Ernslaw One plantation forests are eco-certified and independently audited under the Forest Stewardship Council as sustainably managed (ernslaw.co.nz).

ENERGY SECTOR

There are three state owned organisations (SOEs) in the electricity sector, Meridian Energy, Genesis Power and Mighty River Power. These SOEs compete, along with Contact Energy and smaller generators, to supply electricity to retailers. Smaller generators account for approximately 13 percent of the capacity in the market, such as Todd Energy, TrustPower, and TransAlta. In recent years, there have been increasing investments and installations in wind farms from the major generators in New Zealand, such as Meridian and Trustpower (Statistics NZ, http://www2.stats.govt.nz).

Contact Energy is one of the two largest electricity generators, owning around 28 percent of all New Zealand's capacity providing electricity, natural gas and LPG to around 600,000 customers nationwide. It runs a mix of gas, hydro, geothermal and diesel stations spread over much of the country. Contact Energy is also one of the country's largest listed companies (http://www.contactenergy.co.nz).

Mighty River Power is an integrated energy generation, trading, retailing and metering business. Mighty River Power owns and manages a diverse and expanding portfolio of generation assets throughout the North Island. Their portfolio includes the Waikato Hydro System, with nine power stations along the Waikato River; geothermal plants within the Taupo and Bay of Plenty regions; the Southdown co-generation station, bioenergy production and an active wind development programme. Mighty River Power sells electricity and gas to more than 380,000 customers through retail business Mercury Energy. Mighty River Power is a State Owned Enterprise (SOE) established in 1999. The company is governed by a Board of Directors, appointed by the Government, and is structured into three separate business units: Consumer Markets (which includes retail and metering businesses), Generation and Geothermal. Most of Mighty River Power generation comes from hydro stations on the Waikato River. This SOE owns about 13 percent of electricity capacity in New Zealand. Genesis Power owns about 18 percent of New Zealand's electricity generation capacity. The major generating asset of Genesis is the coal and gas-powered Huntly power station. The company also runs a number of hydro and other stations in the North Island (www.mightyriverpower.co.nz/).

Formed in April 1999, Genesis Energy is a state-owned enterprise with a diverse electricity generation portfolio. Genesis Energy supplies nearly 30 per cent of New Zealand's electricity from its thermal and renewable power stations. It is also a significant energy retailer supplying electricity, gas and LPG to more than 660,000 customers across the country. Genesis Energy is the largest carbon emitter in New Zealand's electricity sector. When operating, the coal-fired units at Huntly are the largest point source of emissions in the country. Genesis Energy's emissions in the 2007/08 financial year amounted to approximately five million tonnes of CO2. If it was obliged to cover the cost of emissions, Genesis Energy would have faced a carbon cost of approximately $150 million (based on a carbon price of $30/t CO2) (www.genesisenergy.co.nz/).

LIQUID FOSSIL FUELS SECTOR

The New Zealand Refining Company is the country's only oil refinery and the leading supplier of refined petroleum products to the New Zealand market, including petrol, diesel, aviation fuel and other products. The New Zealand Refining Company (NZRC) owns and operates New Zealand's only oil refinery at Marsden Point and is a publicly listed company on the New Zealand Stock Exchange. The Company's greenhouse gas emissions are in excess of 1 million tonnes of C02 per annum. NZRC supplies more than 65% of New Zealand's total petroleum fuel requirements. NZRC operates in a very competitive refining market and its major competitors in the Asia Pacific region are not subject to obligations imposed by the Kyoto Protocol first commitment period (2008 to 2012) (www.nzrc.co.nz).

Chevron markets the Caltex and Challenge brands in New Zealand, with more than 430 service stations, Star Mart convenience stores and unstaffed diesel stops throughout the country. Chevron New Zealand is a wholly owned subsidiary of Chevron Corporation, one of the world's leading integrated energy companies. The company conducts business across the entire energy spectrum - exploring for, producing and transporting crude oil and natural gas; refining, marketing and distributing fuels and other energy products and services; manufacturing and selling petrochemical products, generating power; and developing and commercialising the energy resources of the future, including biofuels and other renewable energy. Chevron is based in San Ramon, California (USA) (www.chevron.co.nz/).

Gull Petroleum is a family owned, independent oil company which was founded in Australia and entered the New Zealand market in 1998. Gull was the first petroleum company to sell low sulphur diesel in 1992, and was also the first to bring a biofuel to market in New Zealand with Gull Force 10 (www.gullpetroleum.com.au/).

INDUSTRIAL PROCESSES SECTOR

Methanex is the world's largest supplier of methanol to major international markets and has manufacturing, marketing and supply chain capabilities in North America, Asia Pacific, Europe and Latin America. Methanol is a key ingredient in most everyday products from windshield washer fluid to recyclable plastic bottles, plywood floors to paint, silicone sealants to synthetic fibres. There are also growing markets for the use of methanol in energy applications including: dimethyl ether, direct gasoline blending and biodiesel. Methanex New Zealand is a whole owned subsidiary of Methanex International. Approximately 92% of the methanol produced in New Zealand is sold for export to markets in Japan, Korea and China. Methanex New Zealand is firmly committed to the principles and ethic of Responsible Care®, operating above the stringent requirements laid down by local and central government. Methanex has been following the Responsible Care ethic for over a decade (www.methanex.com/).

Fletcher Building is a New Zealand based company that manufactures and distributes building materials and constructs houses, commercial and civil infrastructure. It has an annual turnover of over $5 billion and employs over 8,000 people in New Zealand. Fletcher Building makes a significant contribution to the New Zealand economy and is the largest of two cement manufacturers, one of two steel manufacturers, and is the largest distributor of building materials and largest construction contractor and builder of residential homes. It already has many processes and initiatives in place to reduce emissions and endeavours to operate at ‘worlds best practice’ for emissions efficiency. Fletcher Building is on the NZX 50 (www.fletcherbuilding.com/).

Holcim NZ is a leading supplier of cement, aggregates, concrete and lime. It is part of Holcim Group, one of the world’s leading suppliers of cement, aggregates and construction related services in over 70 countries on all continents. Holcim has over 35 sites across New Zealand (www.holcim.com/NZ).

AGRICULTURE SECTOR

Meat & Wool New Zealand Ltd (M&WNZ) is a representative body of the Meat and Wool lndustries in New Zealand. The Meat and Wool lndustries consist of approximately 15,000 commercial sheep, beef, deer and goat farmers and approximately 80 processing plants dispersed throughout New Zealand. The Meat and Wool lndustries generated export earnings of $6.8 billion in the year ending September 2008 and accounted for 17 per cent of New Zealand's total merchandise trade. These earnings provide direct employment for about 40,000 people in New Zealand and indirectly employ many more throughout New Zealand and worldwide (www.meatnz.co.nz/).

Landcorp Farming is one of New Zealand's largest farming organisations, including dairy, sheep, beef and deer farming operations. Landcorp Farming is a State-owned Enterprise, owning or leasing 346,500 ha of land. With 112 properties and 1.6 million stock units throughout New Zealand. Landcorp estimates the liability of the emissions trading scheme based purely on livestock emissions and not including any flow through costs at over $4 million in 2013 and over $15 million by 2030, representing 18% and 63% of total earnings respectively (www.landcorp.co.nz).

Ravensdown Fertiliser is the largest supplier of fertiliser in New Zealand, directly supplying more than half of all the fertiliser used in New Zealand agriculture. Ravensdown is 100% owned by farmers, providing them with technical advice and a range of key farming inputs, all at the lowest sustainable cost. All three of Ravensdown's manufacturing plants have been externally audited ISO 14001 environmental certification since 1996 (www.ravensdown.co.nz/).

INDUSTRY ASSOCIATIONS

The Greenhouse Policy Coalition represents the energy intensive sector in New Zealand over a range of industries, including steel, aluminium, dairy processing, pulp and paper processing, coal and gas on the single issue of climate change policy. The GPC was formally set up in 1996 to represent these organisations and play an active role in the Climate Change debate. Total sales of GPC members were $12.4 billion for the year to December 2005, with export value at approximately $8.9 billion. This represented 30.3% of New Zealand's merchandise exports for the year to December 2005 (Statistics NZ). Total direct and indirect employment by the GPC was approximately 79,000, representing about 4% of the New Zealand labour force (Statistics NZ) (www.gpcnz.co.nz).

New Zealand produces relatively few industrial emissions (around 29%) compared to other industrialized countries, and most GPC members were found to operate at "World's Best Practice" during an international benchmarking exercise in preparation to enter into Negotiated Greenhouse Agreements with the government. As a result of the NGA initiative, many of the energy intensive companies have made impressive emission reduction efforts since the 1990's and some have even cut their emissions back to 1990 levels despite significant growth since that time (www.gpcnz.co.nz).

3.5 Semi Structured Interview Questions

Primary Research Questions

1. What are the underlying drivers (risks and opportunities) which motivate and/or inhibit corporate action to address climate change?
2. What are the significant managerial perceptions and organisational variables that affect corporate responses to climate change?
3. To what extent are corporate climate responses influenced by conventional business logic (both in terms of profit-seeking and responses to regulatory demands), institutional/organisational processes, and ethical responsibility/responses to public pressure? Which of these lead to greater levels of commitment and action on reducing emissions, and how are these factors inter-related?

Introductory Questions - Approximately 10 minutes

- How would you describe your job?
- How long have you been with the organisation, and how long in this job?
- How much time do you dedicate to climate related work?
- Has your organisation appointed you as a designated responsibility for climate change and if so, where did the interest in climate strategy evolve? Who/what encouraged this development within the organisation (i.e. to appoint a carbon manager, or start measuring carbon)?
- What sources of information and people have informed and influenced your thinking about climate change? (i.e. trade magazines, climate websites, government, other companies) What sources do you trust and believe?

General Climate Change Risks and Opportunities - Approximately 10 minutes

- Does your organisation consider climate change to be a significant issue to the operation of your business in the future? What are the risks (such as physical effects, legislation, consumer preferences) and opportunities (such as improving energy efficiency, capitalising on market opportunities, improving brand image) you face as a result? How do you make these assessments?
- Has your organisation attempted to calculate its greenhouse gas emissions? If so, do you have Key Performance Indicators (KPIs) or have this information externally verified?
- What is your organisation's strategy to reduce emissions/minimise risk and capitalise on opportunities?
- Where is this effort focused in both your internal activities and external efforts, where is it permeating within the organisation? How have you mobilised resources to deal with these issues? How much time, effort, or money have you dedicated to this issue?
- Is this discussed at the board level? Have you discussed various options on how your organisation has chosen to respond? How have you come to your decisions?

Motivations, Drivers and Barriers - Approximately 10 minutes

- What factors have influenced your organisation's position in relation to climate change? Such as financial concerns, stakeholder pressure, industry competitors, and consumers?
- What factors would you say are inhibiting your decision making processes? For example uncertainty in policy or market prices?
- Has the recent economic recession influenced your climate strategy? If so, how?

Internal Corporate Activities: General Corporate Social Responsibility - Approximately 10 minutes

- How would you say your climate change position is aligned with your general corporate values and activities in relation to corporate social responsibility or sustainability? How is this communicated across the organisation?
- Do you believe the win-win story that dealing with carbon will make money, or there is a business case for sustainability? Has your experience (or stories you've heard) reinforced this view or contradicted it? What got you to believe it (or not)?

Climate Change Policy - Approximately 10 minutes

- What is your organisation's position on New Zealand's climate change policy? International climate policy? Could you please summarise your corporate position in your public submission?
- How has your position on climate change evolved over time? If so, what would you say are the reasons for these changes?
- How does your organisation engage with policymakers on possible responses to climate change including taxation, regulation and carbon trading?
- What was the intention of your submission the Emissions Trading legislation? Do you believe your position will be heard?

Development of External Corporate Position - Approximately 10 minutes

- How is the position of your organisation aligned with other organisations in your industry?
- Do you see any differences with how the other organisations in this industry are dealing with this issue? How are they manifested?
- Do you feel pressure to copy what other organisations are doing?
- Are you a member of any industry associations? How often do you meet peers in other organisations at conferences, industry organisations, etc?

Concluding Questions - Approximately 10 minutes

- What do you believe has been the reason for such debate and controversy over New Zealand's climate change policy?
- What sorts of actions do you think New Zealand should be taking? Who should be responsible?
- What do you believe is the solution to generating more sustainable practices and achieving meaningful emissions reductions?
- Would you say your comments are a reflection of your own personal beliefs, or more representative of your organisation's wider position?
- Are there any further issues which are relevant to your organisation, the industry, or New Zealand climate change policy in general which you feel have not been discussed? Any further comments?

3.6 Invitation to Participate

This email is in regards to an invitation I have sent you to participate as a subject in a research project: '*the drivers for divergence: exploring variation in New Zealand organisational responses to climate change,*' conducted for the completion of my Masters Thesis at the University of Canterbury. This project has been reviewed and approved by the University of Canterbury Human Ethics Committee.

The aim of this project is to investigate organisational claims and actions in regard to climate change. The research will evaluate how New Zealand organisations have responded to increasing pressures from government, investors and wider society to address climate change as a business. The primary intention is to determine if (and to what extent) there is diversity in organisational responses and to then explain why this is so.

The research will involve semi-structured interviews with the relevant environmental or sustainability related personnel within your organisation. These interviews will be designed to allow a free flow of conversation driven by the participants' opinion of the motivations, drivers and barriers to your organisations climate change response. The interviews will last for approximately one to two hours.

I am writing to you to request permission for your personnel to participate in this project. If you would like to discuss this further, please contact me at lkp30@student.canterbury.ac.nz, or alternatively on my mobile at 027 448 3268.

Thank you for your consideration and I look forward to hearing from you.

Lara Phillips

Department of Geography

University of Canterbury,

Private Bag 4800

Christchurch

Invitation to Participate in a Research Study

University of Canterbury

You are invited to participate as a subject in the research project: '*the drivers for divergence: exploring variation in New Zealand organisational responses to climate change*.' This research is being conducted by Lara Phillips, for completion of a Masters Thesis in the department of Geography at the University of Canterbury. The project has been reviewed ***and approved*** by the University of Canterbury Human Ethics Committee.

The aim of this project is to investigate organisational claims and actions in regard to climate change. The research will evaluate how New Zealand organisations have responded to increasing pressures from government, investors and wider society to address climate change as a business. The primary intention is to determine if (and to what extent) there is diversity in organisational responses and to then explain why this is so.

The research will involve semi-structured interviews with the relevant environmental personnel of the participant organisations (for example environmental, social responsibility, or sustainability managers), with an estimated interview time of one to two hours. The interviews will be audio taped. The semi-structured interviews will be designed to allow a free flow of conversation driven by the participants' opinion of the motivations, drivers and barriers to their organisation adopting climate change strategies.

This research is being conducted in association with a larger and second Marsden funded research project at the University of Canterbury, investigating New Zealand organisations' claims of carbon-neutrality. The finalized results of this initial Masters research project (by way of thesis and publications) may be used to inform subsequent publications from the wider Marsden project. However, no confidential information obtained during this Masters research process will be available to be used by the Marsden research team. The tape recorded interviews will be transcribed in writing with the name of the participant remaining confidential. Raw data transcripts will not be available to anyone other than myself and my project supervisors, and neither will the researcher (or supervisors) discuss the content of these transcripts with anyone beyond the anonymised and disguised extracts that are made available through the Masters thesis and other published works arising from it.

I am also a current employee of PricewaterhouseCoopers (PwC), a professional services firm, working under the Climate Change and Sustainability team. This research, however, is not associated with PwC in any way. As a masters student and employee of PricewaterhouseCoopers, I am bound by the ethics procedures of the University of Canterbury and my employer, PricewaterhouseCoopers. Anonymity of the research participant and the confidentiality of the information disclosed in this research are guaranteed. If you have any concerns about this matter, I will be happy to discuss this further.

All participants will be provided detailed information regarding the study and the research will only commence under voluntary informed consent, and when the rights of privacy and rights to withdrawal are agreed. To remove any risks of misrepresentation, the participant and any other interested member of the organisation will be sent the interview transcript if they wish. If the organisation finds any reason not to agree with the researcher's work, the organisation is free to withdraw from the study or recommend revision of the drafted work. The final copy of the thesis will be publicly available at the University of Canterbury and on the university's website.

The project is being carried out for the completion of a Masters Thesis as a requirement for a Masters degree in Geography by Lara Phillips under the supervision of Professor Eric Pawson and Professor Markus Milne, who can be contacted at [eric.pawson@canterbury.ac.nz, Phone: +64 3 364 2987; and markus.milne@canterbury.ac.nz, Phone: +64 3 364 2624] They will be pleased to discuss any concerns you may have about participation in the project.

Thank you for your consideration and I look forward to hearing from you.

Kind regards,

Lara Phillips

Department of Geography

University of Canterbury,

Private Bag 4800 Christchurch

CONSENT FORM FOR PARTICIPANTS

I have read the Information Sheet concerning this project and understand what it is about. All my questions have been answered to my satisfaction. I understand that I am free to request further information at any stage.

I know that:

1. My participation in the project is entirely voluntary;

2. I am free to withdraw from the project at any time without disadvantage;

3. At the end of the research any raw data (with the code names of the research participants only) on which the results of the research or related publications depend, as required by the University's research policy, will be retained in secure storage for five years, after which it will be destroyed. Once data matching has occurred, the list matching the participants name with the research code name will be destroyed by the research assistant;

4. I may decline to answer any questions if I so wish, without any disadvantage to myself of any kind;

5. The precise nature of the questions to be asked in the interview have not been determined in advance, but will depend on the way in which the interview develops. Consequently, although the Ethics Committee is aware of the general areas to be explored in the interview, the Committee has not been able to review the precise questions to be used;

6. If the line of questioning develops in such a way that I feel hesitant or uncomfortable, I may decline to answer any particular question(s) and I may withdraw from the interview, without any disadvantage to myself of any kind;

7. I may withdraw from the process at any time without any disadvantage to myself of any kind. If I terminate the research process before its conclusion, or am unable to continue, then the tape and transcript, will be destroyed at my request;

8. No remuneration is offered for my participation in this project;

9. The results of the research may be published but my anonymity will be preserved.

I agree to take part in this project.

…………………………………….. ………………

(Signature of participant) (Date)

This project has been reviewed and approved by the Ethics Committee of the University of Canterbury.

AGREEMENT OF SECURITY AND CONFIDENTIALITY BY RESEARCHER

I agree to keep all personal information confidential and secure.

I agree to keep the list that matches participants' identities with their research identification code confidential and secure in a locked cabinet in the department administrator's cabinet.

I agree to destroy the list that matches participants' identities with their research identification code once data matching has occurred.

I agree to keep the identity of interviewees, and the contents of the tapes and transcripts confidential.

I agree to destroy the tapes once they have been transcribed.

………………………………………………… ……………………….

(Signature of researcher) (Date)

3.7 Information Sent to Research Participants Prior to Interview

The drivers for divergence: exploring variation in New Zealand organisational responses to climate change

Overview of Semi-Structured Interview Questions

Thank you for your willingness to participate in this research. The aim of this project is to investigate organisational claims and actions in regard to climate change. The research will evaluate how New Zealand organisations have responded to increasing pressures from government, investors and wider society to address climate change as a business. The primary intention is to determine if (and to what extent) there is diversity in organisational responses and to then explain why this is so.

The purpose of this semi-structured interview is to allow a free flow of conversation driven by your opinion of the factors which motivate and inhibit your climate change response and activities. The general structure of the interview will cover the following key topics with approximately 10 minutes allocated for each section:

- The nature of your job within the organisation
- The risks and opportunities associated with climate change
- What factors have influenced your organisation's climate change activities
- How climate change is coordinated and communicated within the organisation
- Your organisation's position on climate change policy
- Your position within the industry and sector specific issues
- Your perspective on New Zealand's situation and concluding comments

You are free to omit any questions and you will be sent a transcript of the interview commentary if you desire. Thank you very much for your participation.

Kind Regards,

Lara Phillips

Department of Geography

University of Canterbury

Private Bag 4800

Christchurch